

Aquilegia

Magazine of the Colorado Native Plant Society
Volume 48 No. 1 Spring 2024



Executive Director's Message

What Is CoNPS?

By Maggie Gaddis



The Colorado Native Plant Society (CoNPS) is a nonprofit organization 2000-plus members strong. We have seven member-led chapters around the state and several statewide committees that have topical foci. As many of you know, I spend lots of time in meetings and at events in which these CoNPS groups are engaged. One of my roles

is *weaver*. I work to weave the activities of the society into a tapestry of engagement. I do this by simply showing up and communicating what happened in other recent meetings. Come along for the ride as I describe all the activities happening around the state in 2024.

Early History of the Colorado Native Plant Society

The **Colorado Native Plant Society** was incorporated on June 10, 1976. The inspiration for the founding of the society came from a workshop on threatened and endangered plants held by the US Forest Service and the Audubon Society in early 1976. CoNPS was founded “to encourage the appreciation and conservation of the native plants and ecosystems of Colorado.”

Our mission, as adopted by the CoNPS board of directors in 2020: *We are a non-profit organization dedicated to furthering the knowledge, appreciation, and conservation of native plants and habitats of Colorado through education, stewardship, and*

advocacy. The pursuit of our mission is multifaceted and far-reaching.

The Geographic Orientation of CoNPS

One of the most frequently asked questions is, “What chapter am I in?” The chapters are not clearly defined by zip code. Members typically choose the chapter closest to them or join multiple chapters—for example, one chapter where you live and one where you frequently recreate. By joining a chapter, you are selecting which communications you would like to receive.

On this accompanying map, there is a heart in every county where we had some engagement in recent years. We have members in many more counties than hearts! And we engage in more geographic areas than our chapters reach. For example, we love to partner with Betty Ford Alpine Gardens in Eagle County. The nearest chapter is the Plateau Chapter, but that’s a pretty far reach.

In some areas, including Gunnison, Routt, and Las Animas Counties, folks are building native plant communities but there are no official chapters there yet.

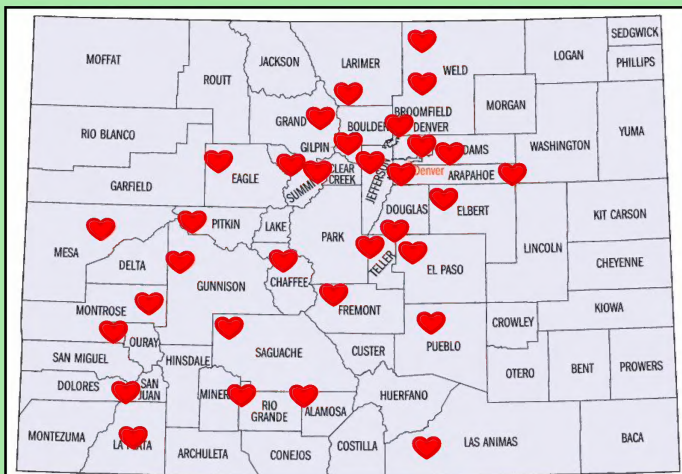
We currently have seven chapters. The Northern Chapter includes the northern boundary of Colorado, east of the Divide to the eastern border of Colorado, and north of Boulder County. The Northern Chapter is very active in Larimer County, including Loveland and Fort Collins.

The Boulder Chapter follows a similar geographic pattern, east of the Divide to the eastern border, and north of Denver County.

The Metro-Denver Chapter is active south of Boulder, east of the Divide to the eastern border, and north of El Paso County. The Metro-Denver Chapter leads field trips in Adams, Arapahoe, Clear Creek, Denver, Jefferson, Douglas, and Summit Counties.

The Southeast Chapter is active in the southeast portion of the state, north from Douglas County

“What Is CoNPS...” *continued on page 20* ►



Hearts indicate counties in which CoNPS has had some engagement in recent years.

Cover photo credits. Native plants in the landscape. Front cover: *Epargyreus clarus* (silver-spotted skipper) and *Asclepias incarnata* (swamp milkweed) in a home garden. © Suzanne Dingwell
Back cover: Female *Selasphorus platycercus* (broad-tailed hummingbird) and *Asclepias speciosa* (showy milkweed) © Ron Beller

Aquilegia: Magazine of the Colorado Native Plant Society

Dedicated to furthering the knowledge, appreciation, and conservation of native plants and habitats of Colorado through education, stewardship, and advocacy

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Managing/Design Editor: Kelly Ambler, alpineflowerchild@gmail.com
Assistant Editors: Sue Dingwell, Alan Moores, Patty Rhodes
Botanical Names Editor: Elizabeth Taylor
Science Reviewer: John Vickery
Copyeditors: Nan H. Cole, Sue Dingwell, Alyse Greenberg, Jennifer Heath, Sue Keefer, Alan Moores, Patty Rhodes, Cathi Schramm, Eric Siegel, Linda Smith, John Vickery

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DIRECTORS-AT-LARGE

Andrea England, Michele Ritchie, Anna Wilson

CHAPTER INFORMATION

Boulder: Sam Ahler, Pat Butler, Alyson Ennis, Debby Martin, Jackie Ramaley, and Lynn Riedel; BoulderCoNPS@gmail.com

Metro-Denver: Tim Berg, Alex Bruce, Connie Ellefson, Beth Lewis, Curtis Manning, Connor Sullivan; MetroDenverCoNPS@gmail.com

Northern: Mason Mizener; northernchapterconps@gmail.com

Plateau: Jim Pisarowicz, Kathy Kimbrough

Southeast: Curtis Nimz

Southwest: John Bregar, Kenar Houghton

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Scholarships: Cecily Mui

WEBSITE AND SOCIAL MEDIA

Webmasters: Mo Ewing, Sue Dingwell

Social Media: Anna Wilson, Tom Zeiner;

CoNPS STAFF

Maggie Gaddis, Executive Director, ExecutiveDirector@conps.org

Anne Beard, Membership and Communications Coordinator, office@conps.org

Featured Story

Bring Back the Birds: How Native Plants Support Bird Biodiversity

By Kate Hogan

I remember the first time I sat in awe of a tallgrass prairie. I was a young girl. The tall stalks of big bluestem (*Andropogon gerardii*) and Indian grass (*Sorghastrum nutans*) splashed against a blue Oklahoma morning sky, and I remember feeling so tiny amid the five-foot-high grasses—and yet as wild and free as I could've hoped, a young kiddo ready to embrace wide open spaces.

Little did I know in that moment of watching scissor-tailed flycatchers soar

overhead that I would discover, in 2019, that we had lost some 2.9 billion birds in North America since 1970 (1,2). Some of the most highly impacted bird species are found in the grasslands and boreal forests of North America.

I had never thought much about the diets of wild birds. Like most of the people I encountered out in the community, I assumed that birds ate bird seed, plus the occasional earthworm plucked by an American robin from the Kentucky bluegrass (*Poa pratensis*) lawn of my childhood home. Even studying biology in college, I didn't take ornithology (GASP!!) because, honestly, I was more interested in marine mammals at the time.

As I began my journey to understand more about native plants, both professionally and personally, I heard from colleagues at the Colorado Native Plant Society and Audubon Rockies that an entomologist from the University of Delaware, Doug Tallamy, had written

several books about native plants and their ecological relationships with local birds and insects. In his book *Bringing Nature Home* (3), I read about Carolina chickadees and their need for 6,000–9,000 caterpillars to raise one clutch (an average of four babies).

“If you can count all of the terrestrial bird species in North America that rely on insects and other arthropods (typically, the spiders that eat insects) to feed their young, you would find that figure to be about 96%—in other words, nearly all of them.” Doug Tallamy, Bringing Nature Home

Bringing Nature Home brought to light some more amazing statistics.

And somehow, one other amazing statistic that I bypassed in those years of biology classes was that 90 percent of

herbivorous insects known on Earth rely specifically on a particular group or family of plants, while approximately 10 percent are generalists within a given ecosystem. Wait, WHAT?! Ninety percent of them?

This led me down a rabbit hole of looking at my favorite invertebrates, the butterflies, and the plants they use as hosts in Colorado. I discovered the Colorado Front Range Butterflies [website](#) (4). It outlines many of the known host plants of butterflies along the Front Range. What honestly surprised me was the diversity of host plants—everything from

native trees and grasses to perennials and shrubs.

I started delving into the diets of wild adult birds found here in Colorado. Baby birds love caterpillars, high in fat and protein, but what were their parents using to nourish themselves while foraging for these caterpillars? In addition to seeds (familiar to many backyard bird watchers), adult ►



Lazuli Bunting (*Passerina amoena*) on *Ribes cereum* (wax currant).
© Brian Sump

◀ birds look for arthropods such as insects and spiders, which is the largest diet component of all; berries; and nectar (for a smaller subset of birds such as hummingbirds and orioles). The Cornell Lab of Ornithology has an incredible resource called **All About Birds** (5), where you can view, within a species profile under the “Life History” tab, what type of food each bird of North America, including native and introduced species, has been observed eating.

For example, my good ol’ friend the American robin, which I recall seeing each spring in my front yard, is mostly an insect and berry eater. The robin’s favorites are hawthorn, sumac, chokecherry, dogwood, and juniper berries. Seasonally, they shift to eating insects, earthworms, snails, aquatic insects, and an occasional shrew or snake. From the historic book, *American Wildlife & Plants: A Guide to Wildlife Food Habits* (6), a rescued gem that someone donated to Denver Audubon’s Kingery Nature Center, I learned that an early study found that American robins in the Eastern prairies and Western mountains/deserts consumed more hackberry fruits than any other plant species, with hackberry comprising more than 50 percent of their berry consumption. An additional chronicled detail of their preferred insects across North America included caterpillars, ground beetles, dung beetles, weevils, spiders, termites, millipedes, and centipedes.

That was it—something HAD to be done. Backyard bird feeders were simply not the answer. Native plants were the answer to bringing back the birds. Listed below are some favorite native plants, though I encourage you to check out **Denver Audubon’s entire list** (7), as well as lists from other organizations (8,9).

Gaillardia aristata, blanketflower. A medium-sized perennial that supports sparrows, finches, grosbeaks, buntings, chickadees.

Prunus virginiana, chokecherry. A medium-large shrub that supports more than 70 species, including woodpeckers, robins, bluebirds, kingbirds, jays, solitaires, waxwings, orioles, towhees, grosbeaks, grouse, turkey, tanagers.



American Goldfinch (*Spinus tristis*) on *Fallugia paradoxa* (Apache plume). © Ken Hall

Helianthus annuus, common sunflower. A large annual supporting sparrows, warblers, finches, woodpeckers, vireos, jays, chickadees.

Ribes aureum, golden currant. Spring yellow blooms on this shrub attract hummingbirds, while fruits attract catbirds, jays, magpies, towhees, robins, solitaires, thrashers, waxwings, woodpeckers.

Please consider adding some of these native plants (and others!) to your own landscape.

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8. <https://www.wildflower.org/>
9. <https://www.nwf.org/NativePlantFinder/Plants>



Kate Hogan has worked in the field of environmental education for more

than 20 years. She holds a BS degree in natural science biology from the University of Puget Sound and an MS degree in nonprofit management from Regis University. For the last eight years, Kate has worked at Denver Audubon as the community outreach manager, where she creates strategic partnerships that help fulfill the organization’s mission to “inspire actions that protect birds, other wildlife, and their habitats through education, conservation, and research.” She presents outreach programs throughout the Denver metro area and manages the Audubon Center at Chatfield, providing public programs and events for visitors who desire a deeper connection to nature. 🌿

Featured Story

Creating a Low-Water Landscape with Native Plants

By Felicia Brower

Colorado, known for its majestic mountains and semi-arid climate, presents a unique set of gardening challenges. Between drought conditions and mostly clay soils, choosing plants for your landscape takes a bit more effort. That's where native plants come in. Colorado's native plants have evolved to thrive in the specific conditions of our state, which makes them a great low-maintenance option for the home landscape.

Designing your landscape doesn't have to be an overwhelming process. Start with a few basics and you'll be amazed at what you can achieve. As you learn more about your specific yard and what grows well in it, you can make changes as needed.

Xeriscaping, or landscaping with water conservation in mind, is a good practice to follow, especially during times of drought, something we often struggle with in the Centennial State. There are seven principles of xeriscaping:

- Plan and design your landscape. Being intentional and making a plan for your landscape ensures that everything uses water efficiently.
- Group plants with similar needs together. Don't mix low-water plants with plants that have higher water needs. When you water, you'll end up over- and/or under-watering and wasting water.
- Water efficiently. Drip irrigation is the most efficient way to water, but if you don't have a system set up, water close to the soil and only as much as needed.
- Improve the soil. Native plants like native soils, but if you have concerns about your soil health, get a soil test from your local extension office.
- Create practical turf and non-turf areas. Xeriscaping doesn't mean you can't have a lawn. You can reduce the size of it or swap out the Kentucky bluegrass with fescue or buffalograss, which have longer roots and don't need to be watered as much.
- Use mulch. Mulch helps to slow down evaporation in our climate and suppress weeds. The type of mulch you use varies—gravel, wood chips, compost, shredded

leaves, pine needles have all been used. Plan for your specific landscape.

- Maintain your landscape. You're creating an ecosystem, so you'll have to do some maintenance like pruning, regular watering, and weeding, especially in the first one to three years. Maintaining your landscape shows other people that native vegetation can look nice and can encourage your neighbors to transform their turf lawns, too.

When Andrea Zimmer and I started Denver Garden Designs, our goal was to help as many people as possible learn how to design their yards and gardens. We spoke about creating a low-water landscape using native plants at the 2024 Landscaping with Colorado Native Plants Conference and are thrilled to share those steps in this issue of *Aquilegia*.

Let's get started!

1. Observe Your Space

The first step of designing your landscape is to observe how you use the space and how natural elements interact with your space. Observe the sun exposure throughout the day, watch the way the rain flows during storms, and pay attention to how you spend time in your space.

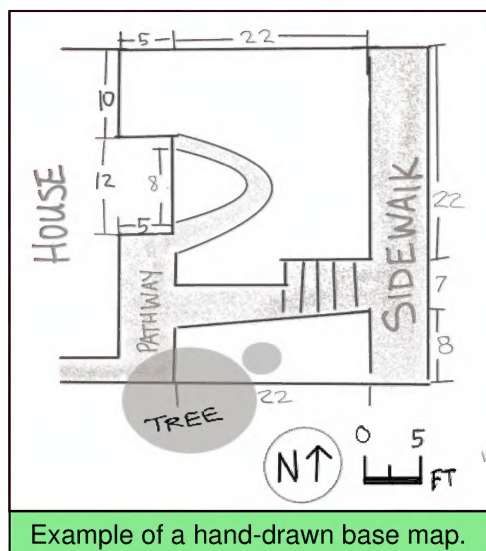
A few questions to consider:

- Do you use your space for relaxation, active enjoyment, or is it purely visual?
- Are there any mobility concerns?
- Are there children or pets to consider?
- Do you have any HOA restrictions?

While it's common to rush through this stage, it's important to fully understand your space so that you don't end up planting something in the wrong place and having to replace it later.

2. Create a Base Map

A base map is a map of your property with all the measurements, existing structures, and considerations on it. Once you've created your base map, you'll be able to easily choose plants that will grow in your space. ►



◀ Whether you want to use Google Maps or sketch it by hand, the main thing you need are the measurements for the areas you want to work in. You can measure digitally (search online for the most up-to-date instructions for how to add measurements to your map) or with a tape measure in your yard. How much space you have will impact how many and what kind of plants you can include in your landscape.

You'll also want to mark your zones: water, soil, wind, sun, and usage. While native plants are drought-tolerant, they will need supplemental watering, especially during their establishment period (the first one to three years). Put plants with higher water needs closer to your water sources. If you have drastically different types of soil, make sure to mark that on your map as well. It is useful to know what the typical wind conditions are where you live and plan accordingly; knowing where any high-wind areas are will impact what you can plant there. Sun and shade areas are important to know. It's worth noting that sun coverage is not necessarily consistent throughout the seasons because the angle of the sun changes throughout the year and tree canopies can change the amount of shade in an area. Record pathways you take through the landscape, views you want to keep or change, and desired plant characteristics (fragrance, feel, etc.).

Don't forget to look up your **USDA Hardiness Zone** and **EPA Ecoregion** to make it even easier to find plants that will survive and thrive in your specific landscape.

3. Select Your Plants: Right Plant, Right Place

Now that your zones are on your base map, you can search for plants that have the characteristics you need. Searching for "fragrant full-sun low-water Colorado native perennial flowers" is easier than trying

to comb through lists of native plants and checking their conditions one-by-one.

Plant Select, **bplant.org**, and **plants.usda.gov** are three good websites for finding plants that will fit in your particular setting.

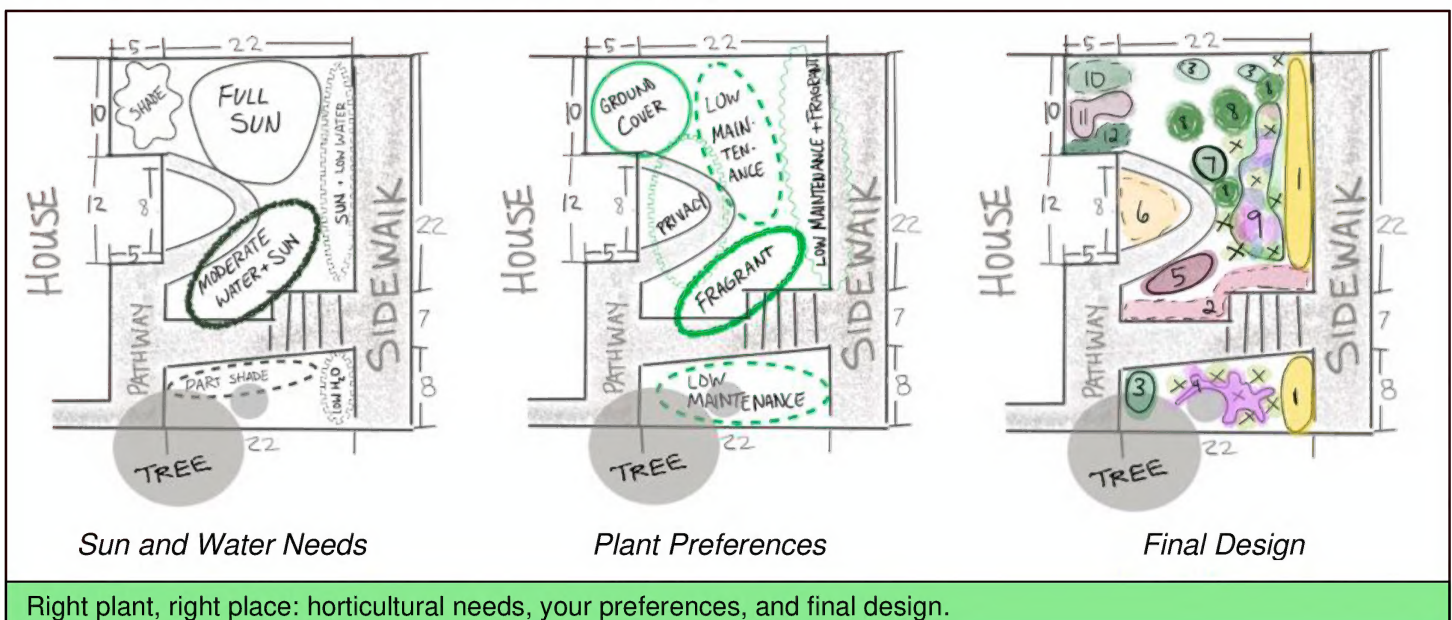
This is a fun, creative project! Make copies of your base map and use Post-it notes to create several designs. Take your time and ask for feedback if you feel stuck.

Next Steps:

- Prep the site: Remove or smother sod, amend soil as needed, and bring in mulch or gravel.
- Find plants: Buy seeds, plugs, or pots from local or online retailers; visit plant and seed swaps; and connect with family and friends to see if they have any cuttings or divisions you can have.
- Plant your plants: Spring and fall are great times to get plants established.

By creating a low-water landscape with Colorado native plants, you're not just creating a beautiful yard, you're also contributing positively to your local environment. Enjoy the lower water bills, reduced maintenance, and the vibrant symphony of birds and butterflies that your landscape will attract.

*Felicia Brower is a writer, editor (Western Home Landscaping and Northwest Home Landscaping (Fox Chapel Publishing) and Aquilegia), and Colorado Master Gardener with a deep interest in incorporating low-water plants native to the arid west into the home garden and landscape. She owns **Backyard GRDN** and is co-founder of **Denver Garden Designs**. She regularly attends courses and workshops to stay up-to-date on new trends in home landscaping, especially those catered toward growing in the Rocky Mountain region. ☺*



Featured Story

Why Garden Tours and Native Plant Sales?

By Maggie Gaddis

The Colorado Native Plant Society began to give native garden tours in 2008 (*Aquilegia* Vol. 32.3 Fall 2008) to inspire folks to use native plants in their gardens before any were available in nurseries. Our early garden tour hosts were all plant propagators, working to grow native plants, then install them in their gardens. Long before the challenges of climate change, and long before the victory garden excitement during COVID, CoNPS members have been forward thinking, looking to rewild their landscapes with native plants. We loved the plants, and that's why we did it. Maybe some of our astute members with professional ties to our mission were thinking about the hypothesis of climate change. Maybe some of them were thinking about native pollinator habitats and forage resources. Many of us just wanted to see our gorgeous native plants a little closer to our doorsteps for observation and appreciation.



Establishing a native habitat to support birds, bees, and insects is an ongoing passion for Susan Hess and her husband. They built their house in 2014, and a landscape architect designed and installed minimal landscaping in 2015, which they have supplemented extensively through the years. Their meadow has at least seven native grass species. Encircling the house is an area which features shrubs, perennials, and annuals planted in decomposed granite. Most of their plants are regional and Colorado natives, representing over 100 species.

Today, our love of native plants puts CoNPS members in the thought leadership role. We *know* these plants. We know where they grow and how they change over the seasons. We might be learning how to garden, but we are seasoned appreciators of native plants.

When I first attended a CoNPS garden tour, I was a host at Jim Borland's garden. I think that was my first taste of backyard native plant propagation. His garden defies the basics of garden design. The greatest heights in his front garden are an array of yucca, agave, and shrubs, right in the middle of the front yard. This centerpiece makes you walk *around* in the front yard and contemplate its beauty. This is possible in any native garden, where we can see our efforts expand, both through seeds and vegetative growth. And it doesn't take a lot of water and fussing to make the plants happy. Once a garden is established, it becomes a perennial gift for ourselves, our wildlife,

and our neighbors. Seed shares and plant swaps grow from native garden tours.

In every community, a garden tour can inspire friendships and sharing. I made [this video](#) in my second month as the first executive director of CoNPS. I had already been a chapter chair for a couple of years. The video explains what I saw blossoming in the society, but thought was under-represented in our winter programming. Even though our core activities have always been botany hikes, talks, workshops, and webinars, many of us are also gardeners. Getting our love of horticulture into our chapter programming is one benefit the garden tours facilitate.

I remember feeling worried, very worried, about what people would think of my messy garden in the restoration process when I first hosted my garden for the Southeast Chapter garden tour. It turns out that imperfection makes a native garden seem possible for anyone

who is simply trying. Anyone who is trying is welcome to host their gardens for a garden tour. Bringing many minds into your garden helps solve problems. Based on feedback I received in the last few years, I can say that watching the transitions is one thing people appreciate the most.

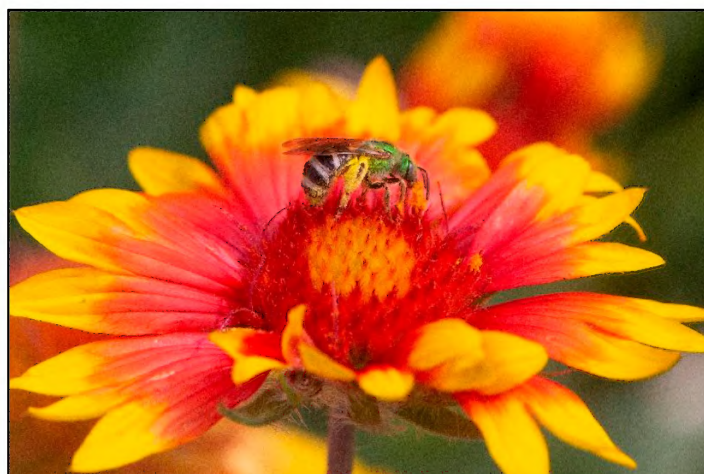
As we decentralize the garden tours by promoting Horticulture Committee leadership and chapter involvement, we are seeing a proliferation of garden tours and plant sales. There are three new garden tours in the mix this year for a total of seven garden tours around the state. The Gunnison garden tour is organized by Lynn Cudlip, and the Plateau Chapter's Grand Valley garden tour is being organized by leadership team member Kathy Kimbrough. We will also visit Dennis Swiftdeer Paige's garden in Conifer and participate in the Estes Park Garden tour in July. These tours are definitely going to be worth the ►



The meadow on Sherry Pitt's property was designed as a one-acre native grass garden with five species of grasses planted in naturalistic drifts. The garden provides appealing visual contrasts, natural weed suppression, drought tolerance, and endless intrigue. Planted within the grasses are over 50 native species of flowering plants. There are a few chosen non-natives, all flowering herbaceous plants. The garden attracts many pollinators.

◀ drive if you live on the Front Range. You're welcome to join any chapter's garden tour or event by registering in the CoNPS calendar.

We are working to identify native plant propagation partners in every chapter. Our partners this year (Harlequin's Gardens, High Plains Environmental Center, and Colorado Native Plant Nursery) will offer native plants for sale in the Northern, Boulder, and Denver Chapter garden tours. Volunteer members in the Southeast Chapter will propagate and divide native plants for sharing at the Colorado Springs Sustain-a-Center, our Colorado Springs office and CoNPS bookstore home, on June 23. We will install a



Started in 1997, everything in the front of Dave Sutherland's home is native and mostly Boulder County native. Much of the back yard has natives too, with some non-native gardens. There are native trees, shrubs, lots of native wildflowers and native grasses, and a couple of native grass lawns. There are over 90 species of Colorado native plants in his garden.

native garden designed and propagated by Colorado Springs horticulturist and CoNPS Vice President, Alex Crochet. We will have our June board meeting and a potluck that afternoon. All are welcome to join in the fun! If you can't be there in person, we will still have the meeting on Zoom so all can attend.

We are still looking for a native plant propagation partner in the Southwest and San Luis Valley Chapters. We also have a new chapter, the Arkansas River Valley Chapter that needs a native plant propagation partner. Could that be you? A chapter could endeavor to follow the pathways of member engagement in seed collection, winter sowing, spring dividing, and plant sharing to supply plants. A chapter could work with a nursery. Please keep in touch and attend our Horticulture Committee meetings on Zoom to follow the conversation around the state and to participate. The meetings are held every third Monday of the month at noon. [Check out the calendar](#) to register for the next meeting.

Want to share your garden? Please do! No garden is too young or too "in progress." Seeing the progress is the highlight of the learning experience. If you are trying to grow more natives, we want to see your garden and celebrate you with our support! [Click here to learn more about sharing your own garden during the Garden Tours.](#)

Not ready to share your garden? Help us spread the word by sharing this with your friends and colleagues.

Native Plant Partners



Harlequin's Gardens is a family nursery and garden center in Boulder, Colorado, dedicated to natural and sustainable gardening for the local region. They specialize in native plants, organic vegetable and herb starts, xeriscape, hardy roses, Colorado-adapted and unusual perennials, fruit trees and berry bushes, ground covers, hardy cacti, and seeds.

Colorado Native Plant Nursery is a new endeavor that grows plants in Colorado that are native, healthy, ▶



◀ and support insects in our local food web. They are good for the environment, grown without pesticides, and are perfectly adapted to our unique climate. Embrace the beauty of Colorado's native plants and create a sustainable landscape that supports our local ecosystem.



High Plains Environmental Center (HPEC) is a native plant nursery and an educational center in Loveland. They focus on conserving and restoring Colorado's unique native biodiversity, and work to educate communities to become replicable

"living laboratories" which demonstrate restorative examples of land stewardship, native plants, and wildlife habitat. HPEC grows native plants from seed, many of which are locally collected ecotypes that are particularly valuable for restoration projects. Visitors can enjoy a demonstration garden and restored wetlands. Their native plant sale is online; buyers are notified when orders are ready to be picked up at the nursery.



Serving the Denver Metro area, **Honeywood Garden Design** provides consulting and garden design, creating and installing distinctive native Colorado gardens and healthy urban ecosystems using



Centerra, the Loveland community where HPEC and Chapungu Sculpture Park are located, is the first Wild Habitat Community certified by the National Wildlife Federation, and the first Sustainable Landscape Community certified by the Association of Landscape Contractors of Colorado. The 26-acre Chapungu Sculpture Park has numerous large-scale planting beds showcasing native and xeric plants. The Park received the Plant Select Showcase Garden Award In 2019.

regenerative practices. They specialize in native pollinator, prairie meadow, and woodland shade gardens. All their practices are for regenerative gardening, which means building healthy soil, creating thriving ecosystems rich in biodiversity, protecting our air and water, and avoiding chemical fertilizers and pesticides. Beautiful landscapes are their goal and healthy gardens are their priority.

2024 CoNPS Native Garden Tours and Plant Sales/Shares

June 8

Metro-Denver Chapter Native Garden Tours and Plant Sales, partnering with **Colorado Native Plant Nursery**

June 15

Boulder Chapter Native Garden Tour and Plant Sale, partnering with **Harlequin's Gardens**

June 16

Gunnison Native Garden Tour

June 22

Plateau Chapter - Grand Valley Native Garden Tour, partnering with **Bookcliff Gardens**, **Valley Grown Nursery**, and **Felicia Bishop Realty**

June 23

Southeast Chapter Native Garden Installation and Plant Swap, partnering with CoNPS member Kristin Maupin and the City of Colorado Springs Horticulture Department

June 30

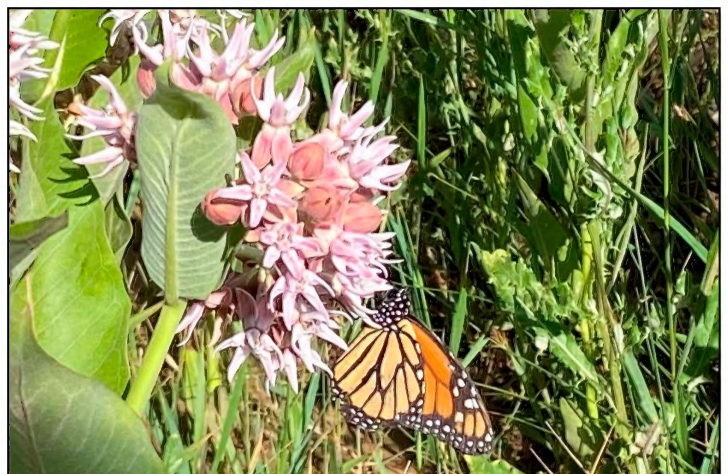
Northern Chapter Native Garden Tour and Plant Sale, partnering with **High Plains Environmental Center**

July 13

Estes Park Garden Tour

July 17

Metro-Denver Chapter Native Garden Tour, Dennis Swiftdeer Paige's garden in Conifer 🌀



Great Basin wild rye, showy milkweed, rayless coneflower, Rocky Mountain penstemon, pussytoes, copper mallow, and fringed sage do well at Lynn Cudlip's garden. The garden is about 20 percent native.

Conservation Committee Updates

By Brad Klafehn

It has been a busy period for the Conservation Committee, both with agency actions and state legislation.

♦ The Conservation Committee and CoNPS members Peggy Lyons and Gay Austin participated with other environmental organizations in a two-day objection meeting with the US Forest Service on the Forest Plan for the Grand Mesa Uncompahgre and Gunnison (GMUG) National Forest on February 21 and 22. Our issues with the Plan's Species of Conservation Concern (SCC) list regarding rare native plants were heard by Greg Smith, Director of Lands and Realty for USFS in Washington, DC. Our concerns with USFS inaction on invasive weeds were heard by Scott Fitzwilliams, Acting Deputy Regional Forester (Region 2). Director Smith released his findings on April 11. He directed Regional Forester Fitzwilliams to re-examine and justify his decision to only accept plants to the SCC list which met all four criteria regarding continued viability on the Forest. No other USFS region has required species to meet such strict criteria. Deserving rare plants on the GMUG may yet get added to the SCC list! No response has been received from Mr. Fitzwilliams on the invasive species part of the objection.

♦ CoNPS joined with the Native Plant Societies of Arizona and New Mexico to request that BLM's proposal for 'conservation leases' include a provision

to exempt non-profits from the financial fees when doing restoration work on BLM. BLM accepted our proposal, and now has two types of leases: 'restoration leases', for which fees could be waived, and 'mitigation leases', required of for-profit entities.

♦ The Colorado Legislature this year, due largely to the advocacy of the Department of Natural Resources, has passed bills to conserve native rare plants, habitats, and biodiversity!

We followed and endorsed the following legislative bills this session.

HB24-1117: Adds pollinators and rare plants to species the Department of Natural Resources/Colorado Parks and Wildlife (DNR/CPW) can conserve and manage. Colorado is one of a handful of states where the state wildlife agency has no jurisdiction over invertebrates or rare plants. This bill creates full-time positions to conserve pollinators and rare plants, makes possible programs to study and fund them, and makes DNR/CPW responsible for, and an advocate for, the conservation of pollinators and rare plants! It also renames the "Nongame, Endangered, or Threatened Species Conservation Act" to the "Nongame, Endangered, or Threatened Wildlife and Rare Plant Conservation Act," making funding for rare plants available under the state's Species Conservation Trust Fund.

Bill Status: Conservation Committee Co-chair Brad Klafehn testified in favor of the bill in the House Agricultural Committee; Executive Director Maggie Gaddis testified in favor of the bill before the Senate Agricultural Committee. The bill has passed both houses and was signed by Governor Polis.

SB24-005: Restricts new nonfunctional turf and the use of invasive plants species in much landscaping. 'Nonfunctional turf' is defined as turf ("continuous plant coverage consisting of nonnative grasses or grasses") which is not in a recreational use area (playgrounds, sports fields, portions of parks, golf courses). Existing turf is grandfathered in. Local entities are encouraged to use 'water-wise landscaping,' emphasizing native plants. Local entities may not restrict the use of native plants, but may make their non-functional turf requirements stricter than state law.

New State construction projects begun after January 2025 will not install nonfunctional turf or invasive plant species. Before January 1, 2026, local governments and special districts will have to enact or amend and special districts will have to enact or amend



Governor Polis signing HB24-1117. © Brad Klafehn

"Conservation Committee..." continued on page 27

Wildflowers: What to Know before You Grow

By Jim Borland

The relatively sudden explosion of interest in wildflowers reveals not only a new fad but also a renewed interest in color in the landscape coinciding with the increased use of perennials and bedding plants by landscape architects. Furthermore, awareness has also increased for the critical need to sustain pollinator populations, which depend on native plants. The use of native plants in urban and suburban landscapes helps to replace the loss of native habitats.

The use of these new materials has not proven easy. Some of the problems encountered are due at least in part to the exorbitant claims made by those who have a product to sell or a message to tout. A desire for quick and simple results also contributes to the problem. We would like to be able to sow wildflower seed once and then retire to reap only the colorful benefits, with no additional labor or material requirements necessary to maintain this newly created ecology. A certain amount of research is requisite.

A good picture of the realities involved includes almost exactly the same considerations one would expect when establishing grass from seed. Ultimate results will depend largely upon whether or not the site will be irrigated. Without irrigation, fewer seeds will germinate; establishment, growth, and cover will be slower; and the ability of an individual species to reseed will be greatly diminished.

Anyone who has studied the wildflower mix native to various **life zones and regions** of any one state realizes that the species diversity is great; factors such as soil pH, soil salts, soil texture, climate, elevation, slope, and exposure all contribute to the plants' adaptations and should also be considered when selecting a wildflower seed mix. The ultimate, self-preserving, and enduring wildflower mix would replicate these regional forb and grass species as exactly as possible.

There are now several commercial wildflower seed sources, but only a few producers of this seed. It is from these few producers that suppliers buy their

seed, perhaps add a few locally produced or collected species, mix them together in various proportions, according to proposed adaptability, and then offer them for sale to us, with some proprietary, often catchy, or regional label.

These mixes are commonly available with a regional sun or shade preference, often with some kind of height component as well. They will contain annuals, biennials, and perennials in a proportion decided by both availability, which can largely be determined by crop success, and by that company's decision on what constitutes a good mix for the intended purpose. Most mixes are designed to contain enough diversity such

that quick and long-lasting color is assured for at least the first growing season. As the season progresses, different species will predominate, usually giving the site a constantly changing palette of color and design.

Today we can find mixes that contain not only species that are more adaptable to specific regions, but that are native to those regions as well.

The chances are now

better that, without investigation, one will receive a better adapted mix specific to needs or region. The difficult part is that not every seed seller has these newer species.

The best selection choices will be made by buyers who become knowledgeable about the flora of a particular region through the use of manuals, popular wildflower books, and scientific floras. With this investigation in hand, it will be easy to determine if an advertised "native" mix is actually native or merely a conglomeration of species that may have escaped sometime in the past, or if it has species native to some other part of the country or the world.

Seed bed and sowing preparation of the wildflower site are essentially the same as those followed for preparing a site for grass. This includes any of the common practices of disking, plowing, or rototilling to a depth of three to eight inches. Any means that will ensure good seed-to-soil contact and cover can be ►



Newly emerging *Pinus edulis* (pinyon pine) seedling.
© Loraine Yeatts

◀ employed. This includes seed drilling or broadcasting the seed with a drop or cyclone spreader followed with a light hand raking or mechanical harrowing. Even hydroseeding has been successfully employed, although it is important to not leave “leftover” loads in the mixing tank for any appreciable time since many wildflower species will germinate quickly when moistened. Seeds that germinate in the mixing tank are delicate and will be destroyed when forced through the applicator gun.

Late fall or very early spring sowing is recommended in order to take advantage of the greater amounts of precipitation usually occurring during these seasons. Fall sowings should be made late enough so that cold soil temperatures will not encourage immediate germination and subsequent death to the relatively fragile seedlings due to freezing temperatures. Spring sowings should be made early enough to take advantage of the spring rains and to provide enough time for at least the annual species to establish and bloom.

Perhaps the next order of consideration is weeds. Soils that have been either previously covered with turfgrass or otherwise recently disturbed may contain from as few as three to as many as 750 weed seeds per square foot, 99 percent of which occur in the upper four inches. With some species’ seed remaining viable for as long as 1,700 years, it is imperative that some measure be found to control them. Common

means for controlling weeds can include either removing existing weeds and weed debris from the site by hand, covering the soil with cardboard or newspaper, or using a herbicide to kill the existing living vegetation before soil preparation begins. After soil preparation, the site can be irrigated to germinate a proportion of remaining weed seed, then the seedlings removed or killed. Although this process can be repeated often, even a small percentage of the original seed numbers will create future problems.

After germination of the wildflower seeds, controls include spot-spraying with herbicide and hand-pulling or cutting. The major disadvantage of these measures is the difficulty of correctly identifying the target and nontarget species. Learn to distinguish native plant seedlings, especially the desired annuals and biennials.

Unlike the establishment of grass stands, the use of pre- or post-plant fertilizers is not currently recommended. Rather than encouraging the growth of leaf blade area, early development of root, stem, and flower structures should be the intent. Although the nutrients required to encourage this kind of growth are generally known from research on other floral crops, research is completely lacking on the amounts or types necessary for the establishment, early growth, and continued production of wildflowers grown from seed. Many excellent stands have been established on “poor” soils with no fertilizer applications. ▶



Newly emerged *Penstemon barbatus* (scarlet bugler) seedling in the home landscape. © Loraine Yeatts



Mature *Penstemon barbatus* (scarlet bugler) in the home landscape. © Loraine Yeatts

◀ After sowing, the use of mulches and supplemental establishment irrigation is the same for wildflowers as it is for ensuring a good stand of grass from seed. If mulches have been necessary to prevent erosion or hold moisture on nearby sites where grass has been sown, then their use will probably be necessary on the wildflower site as well. Supplemental irrigation for germination and establishment will ensure a better stand than reliance on natural precipitation in almost all cases. Sufficient water should be continually applied to keep the site moist throughout the germination period and for some time afterward for seedling establishment, followed by a gradual tapering of irrigation frequency.

Native wildflower stands typically occur alongside associated native grass species. This association helps bind the soil and provides a foil for a better display of blossoms. Although little research has been accomplished to determine which species are best for the various regions or sites, unquestionably, the quickly spreading and competing species, such as bluegrass, are to be avoided. Few wildflowers are able to compete, especially when young, with the commonly used turfgrass species or cultivars. Bunch grasses, such as the native fescues or Indian ricegrass are the preferred types. Sideoats grama, little bluestem, and blue grama are even better choices.

Another major problem often encountered is the reduction in species density, diversity, and blossom numbers with successive seasons. Annuals and biennials often do not reseed in the anticipated numbers in our climate and soils, leaving only the perennials to carry the show. Amending this reduction in performance involves some guesswork and

experimentation on the part of the site manager since little research has been done in this area. Additional seed could be sown, but the potentially damaging effects from such disturbance to the remaining wildflowers is almost certain. Individual nursery-grown plants could be added with care. At least one wildflower seed company is experimenting with growing its product in bedding-type flats, which are then either divided into many cell units or installed as an entire flat unit much like sod, sans weeds.

Aesthetics may dictate a fall or spring ritual of clearing away the past season's old stems and spent seed heads. However, the birds would appreciate this winter standing food larder even if the maintenance crew does not appreciate what is often considered to be unattractive dried plant materials. Overwintering insects would also appreciate a safe resting place. Spent plant tops can be mown to a height of four to six inches.

In conclusion, your expectations will largely determine the success of your endeavors with growing wildflowers from seed. Knowledge of the variables involved and the potential problems to be encountered will go a long way in determining the success or failure of the venture.

Weblink: [life zones and regions https://conps.org/home-2/resources/plants-habitats/](https://conps.org/home-2/resources/plants-habitats/)

Jim Borland has been fooling around with native plants for more than 40 years in private, commercial, and public venues. His home garden contains thousands of native plants, most grown from seed at home and not supplementally watered for 20 years. Jim has written hundreds of articles, given talks too numerous to count, and continues to grow and plant the two or three native plants not yet in his garden. ☺

Pollinator Power

Studying the Health of Colorado's Native Pollinating Insects

By Amy Yarger

Our quality of life in Colorado depends on pollinators, from the availability of fresh food to the survival of our beautiful natural areas. Colorado not only has more than 1,000 bee species and almost 300 butterfly species, but it's also home to flies, beetles, and other insects that transport pollen. These animals are found in every Colorado ecosystem, from our prairies to our alpine tundra to wetlands to deserts. Colorado is also fortunate to have an engaged community of educators, scientists, and advocates for these important animals.

Recently, the state of Colorado took an important step for our future and the future of pollinators. In 2022,

Senate Bill 22-199—officially titled Native Pollinating Insects Protection Study—was signed into law by Governor Jared Polis, commissioning this pollinator study through the Department of Natural Resources. No study like this had ever been done in Colorado before, and it required a yearlong collaborative effort by Steve Armstead (Xerces Society for Invertebrate Conservation), Dr. Adrian Carper (University of Colorado Museum of Natural History), and Deryn Davidson (CSU Extension), as well as many other local and national experts. These authors reviewed the existing scientific literature about native pollinating insects, asked state agencies and researchers ▶

◀ about their priorities and practices, and then compiled recommendations for ensuring the health of our pollinator communities. While the study focuses on state agencies and programs, the general recommendations are relevant to any of us who want to help pollinators.

The study found that protected lands and diverse habitats help Colorado's pollinators, but that human-caused environmental change poses a significant threat to their continued diversity and abundance. Specifically, habitat loss, detrimental land-management practices, pesticide use, exotic plant and insect species, and climate change all must be addressed to support healthy pollinator populations in Colorado. However, there is more research to be done, especially about the impacts of pesticides on pollinator health, as well as the impacts of non-native plants and insects on native pollinators, particularly in urban areas. There are also groups of pollinators that we know less about, such as flies, beetles, moths, and wasps.

To address the threats to pollinators, the study identifies five main priorities: protecting at-risk insect species, prioritizing pollinator habitat, addressing negative environmental impacts on pollinators, reducing pesticide risk, and monitoring pollinator health. What that means in practice runs the gamut from planting more habitat at state facilities to creating long-term plans for land management on state lands. Private individuals and organizations were not the original intended audience for this study, but we can glean great wisdom by sharing the study with our own communities. We can all adopt pollinator-friendly

practices such as creating oases for native pollinators throughout neighborhoods and parks, avoiding pesticides, and collecting data about our native and managed pollinators. Collaborations among organizations such as the CoNPS, as well as the sustained efforts of nature lovers everywhere, will ensure that this study's recommendations lead to thriving pollinators in Colorado.

See the following websites for more information about the Native Pollinating Insects Protection Study

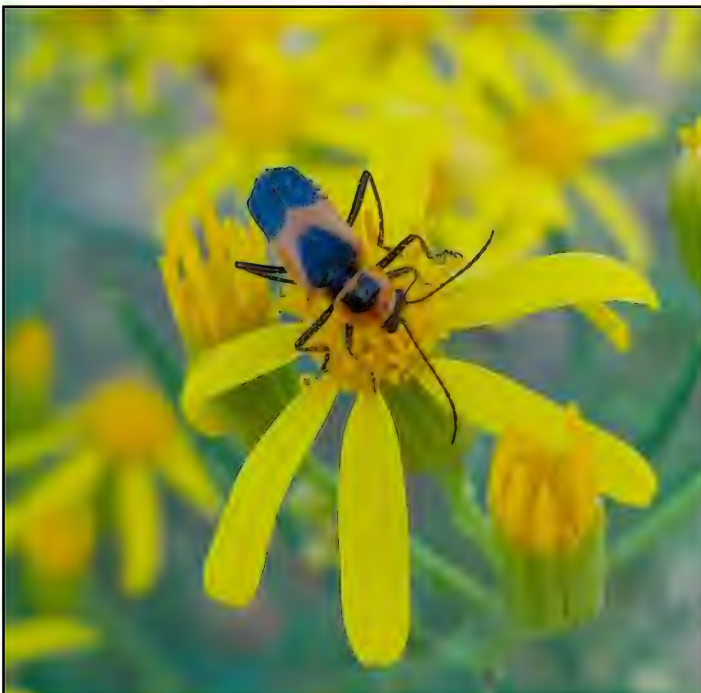
https://drive.google.com/file/d/1HByF7H2qQ4vf_0GhKEG2eNiArs9GlwrP/view

<https://www.peopleandpollinators.org/native-pollinator-study>

<https://www.xerces.org/press/colorado-legislature-passes-bill-authorizing-state-wildlife-agency-to-study-and-protect>

<https://dnr.colorado.gov/governor-polis-and-the-department-of-natural-resources-release-pollinator-report>

Amy Yarger, Senior Director of Horticulture at Butterfly Pavilion, has worked in the public horticulture field since 1996. She received a bachelor's degree in ecology and evolutionary biology at the University of California, Irvine and then went on to study plant-animal interactions at the University of Michigan. Her master's thesis concerned the effects of invasive weeds on pollinator-plant relationships. Amy currently leads Butterfly Pavilion's local pollinator habitat initiatives, such as the Baseline Pollinator District, Manitou Springs Pollinator District, and the Urban Prairies Project, which restores habitat in urban and suburban natural areas. Her efforts at Butterfly Pavilion, where she has worked since 2000, touches on many of her passions: plants, insects, habitat conservation and science education. ☺



Chauliognathus basalis (Colorado soldier beetle) on *Senecio spartioides* (broomlike ragwort). © Amy Yarger

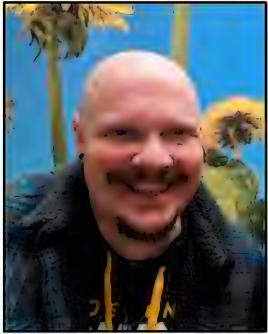


Bombus nevadensis on (Nevada bumblebee) on *Cleomella serrulate* (Rocky Mountain beeplant). © Amy Yarger

Member Profiles

In the past year, several new people have volunteered for leaderships positions within CoNPS. We highlight a few of these valuable volunteers below.

Board of Directors



President. Alex Smith is the current president of the CoNPS board of directors. He graduated from Purdue University with a BA in history and political science in 2011. He has always been fascinated with the synergy of our planet's ecosystems. The spaces where humans, animals, and plants interact the most

intimately are a key focus of his. In that light, he has worked in the horticulture industry for the past five years; before that, he was a social worker and a therapist for nearly 10 years. He enjoys vegetable gardening and is currently studying high-altitude Colorado native fruit cultivation. He has been working toward a model of structure and sustainability for CoNPS this past year in an effort to enable us all to have a positive impact on the native plant populations of Colorado. Alex's catchphrase is: "That's a good problem to have." Alex says, "Celebrating the challenges that face us, let's keep growing and learning together as a society of plant enthusiasts." He can be reached at alscosgrow28@gmail.com for any and all CoNPS-related issues.



Vice-president. Alex Crochet has had a rich, multilayered career path working for the Colorado State Forest Service, on a ranch in Durango, as the habitat creator for the Cheyenne Mountain Zoo, and now as the horticulture director for the city of Colorado Springs. In addition to a career directing the city's

horticulture group, Alex is the CoNPS vice-president and serves on the Horticulture Committee. He

gardens at home and paints when there's time. He lives in Colorado Springs.

Secretary. Elizabeth Rose recently finished her senior year at Air Academy High School in Colorado Springs. She intends to major in ecology in college. She has been a member of CoNPS since 2021, during

which time she participated in multiple field trips and led a field trip. She has also volunteered for many CoNPS events. As a volunteer research intern at the Denver Botanic Gardens, she helped collect data used to inform grassland restoration projects led by the Bureau of Land Management. She is currently monitoring the germination of native plant seedlings grown in greenhouses by Colorado Springs horticulturist Alex Crochet. When not marveling at the beauty of the native Colorado ecosystems, she dances as a soloist with the Colorado Youth Ballet; spends time with her dog, Ziggy; and reads the works of Emerson and Thoreau.



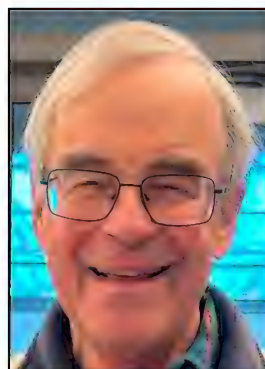
Treasurer. Gwen Kittel has a BS in range and wildland science from University of California Davis, and an MS in botany from the University of Wyoming. She has 30 years of field experience in vegetation assessments and has worked in all types of vegetation throughout the western United

States. Her focus is on wetland and riparian vegetation classification, mapping, and restoration. Gwen has also worked for the Colorado Natural Heritage Program, NatureServe, and the Nature Conservancy. Currently she is a museum associate with the University of Colorado Boulder Herbarium (COLO), and runs her own consulting firm, Green Willow Consulting. She is also the chair of the Field Studies Committee. Gwen lives in the mountains above Boulder with her husband and her two cats. She is the author of the field guide *Willows (Salix) of Colorado: Their Ecology & Identification*. 2023.

<http://www.gwenkittel.com/>

Additional board of directors include **Andrea England** (new), **Michele Ritchie** (new), and **Anna Wilson** (serving since 2018).

Committee Leaders



Conservation Committee

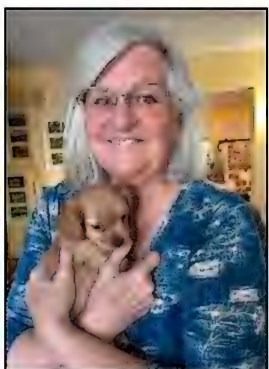
Mo Ewing has been a member of CoNPS since 2003, when he moved to Colorado from New England. In the past, he has served as the CoNPS treasurer and chair of the finance committee. He is also heavily involved with managing the CoNPS website and has ►

◀ given the ever-popular *Introduction to Colorado Wildflowers* presentation several times. See *Aquilegia* 2023. 47.4:25 for a full biography.



Brad Klafehn is a co-chair of the Conservation Committee. Originally from the far north of New York State, on the St. Lawrence River, Brad began advocating for Colorado's environment in 1975 as an employee of the Mining Workshop of the Colorado Open Space Council (COSC). He worked there on coal-leasing

and oil-shale-development issues, also lobbying at the Colorado State Capitol and testifying before Congress. President Carter invited him to the White House for the signing of the Surface Mining Control and Reclamation Act in 1977. COSC has since evolved into Conservation Colorado. After helping a friend build his own house in Hotchkiss, Brad became a staff member of the Western Colorado Congress in Montrose (now Western Colorado Alliance for Community Action), working on powerline and CO₂ pipeline issues. He returned to Denver to earn a master's degree in public administration from UC Denver and spent 21 years with the City of Denver, starting in parking management and then moving to the budget and management office as a budget analyst, where he ultimately became a special project manager to the city comptroller. Brad's well-worn and porcupine-eaten copy of Ruth Nelson's *Handbook of Rocky Mountain Plants* accompanied him on many backpacking trips. In the 1970s, he also came across a population of Colorado hookless cactus on the Uncompahgre Plateau, one of the first sightings in Mesa County. In 2011, he was a co-volunteer of the Year with the Colorado Natural Heritage Program Adopt-a-Rare-Plant Program, having focused on Rothrock's Townsend daisy.



Linda Smith is the former administrative coordinator for CoNPS, having retired in April 2022. Linda is a member of the northern chapter and resides in Loveland with her four-month-old puppy, Winnie. She has two daughters and two granddaughters in Colorado, along with her brother and her 100-year-old father, who she

swears is the healthiest member of the entire family, and who was recently awarded the French Legion of Honor for his service as a glider pilot during WWII. Her son, two grandsons, and new great-granddaughter live in Phoenix. She has been a member of the

Conservation Committee for more than 12 years. Linda, Mo, and Brad Klafehn now share duties as co-chairs. Linda has written several comment letters and Conservation Corner articles, but over the years has mostly served as a liaison between various conservation groups and our committee, board, and staff. For the remainder of 2024, Linda will be the CoNPS representative on the City of Fort Collins Natural Areas Department technical advisory committee for the updating of the 2014 Natural Areas Master Plan. In her spare time, she enjoys botanical illustration, gardening, and photography.

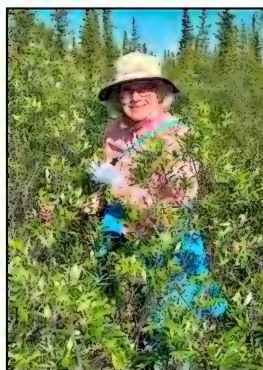
Chapter Leaders

Boulder



Pat Butler, retired from her profession in public health law and policy, has been a CoNPS member for more than 40 years. She has a particular affinity for alpine flora that she encounters when backpacking in the Sierras, Rockies, and Wind

Rivers, and she has a special interest in Colorado's native thistles.



Debby Martin is a member of the Steering Committee for the Boulder Chapter of CoNPS. She describes herself as an aspiring naturalist eager to learn about the complexities of the natural world. Since at least high school, she has had an interest in plants, nurtured initially in her family's flower gardens. Debby's background is in geology and

environmental sciences, including hydrology, ecology, and meteorology. For more than 35 years, she worked as a hydrologist with the US Geological Survey, and, over the last 20 years, has focused on the hydrologic and erosional effects of wildfires. Debby's interest in native plants has deepened as a result of her research to understand watershed recovery after wildfires.



Lynn Riedel has been involved with the Boulder Chapter for about 30 years and is currently serving as a steering committee member and chapter co-representative for the CoNPS Board. Her career has been in natural areas management in Colorado, initially working with the National Park Service. Her academic background is in

biology and science education. Since the mid-1990s, she has worked as a plant ecologist with the City of ►

◀ Boulder Open Space and Mountain Parks Department, specializing in grassland ecology. In Dinosaur National Monument and in Boulder, her work has included rare plant monitoring and habitat management, native plant community monitoring and mapping, and comprehensive natural area management planning. Lynn currently serves as chair for the Colorado Natural Areas Council.

Jackie Ramaley also serves on the Boulder chapter leadership team.

Metro-Denver

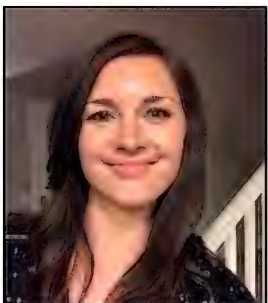


Tim Berg is a graduate of the University of Maryland and a consultant with a technology background. He has had many years of experience teaching and educating adults. He is passionate about native plants and habitats in wild areas, neighborhood settings, and urban locations. Tim is a strong advocate for the need for native plants to promote pollinators. He has worked on many environmental projects and events in Colorado, Utah, California, Maryland, Virginia, Costa Rica, and Japan. Tim won the Jefferson County Sustainability Award in 2023 and has won several Mayor's Beautification Awards. Tim is also the Colorado Ambassador for Rotary International's Operation Pollination and is a National Fire Protection Association Certified Wildland Fire Mitigation Specialist.



Connie Ellefson is an engineer, landscape designer, and author on various topics. She is the principal author of *Xeriscape Colorado: The Complete Guide* and *Xeriscape Gardening: Water Conservation for the American Landscape*. When she designs mostly commercial landscape plans,

she uses xeriscape/native plants whether clients ask for them or not. Her latest book, *Clear the Space...Feel the Rush*, is about decluttering body, mind, and stuff, so you can grow your native plants nonstop, brimming with energy and unencumbered by guilt about the chaos back in the house.



Beth Lewis and her husband hired Curtis Manning and Meadow Pro to transform their effectively sterile Denver home landscape in early 2022 after learning a bit about xeriscaping and the benefits of native plants. Beth attended Curtis's *Go Native! Landscapes Made for*

Colorado presentation while awaiting her own native plant installation, and then found herself reading Doug Tallamy's books and anything she could get her hands on related to native plants and their benefits. Beth has since been unable to stop talking about Colorado's native plants, and became a partner in Meadow Pro, helping more people have the same experience she did.



Curtis Manning is a seasoned professional landscape designer with extensive knowledge of Colorado's native plants and management. He earned a BS in horticulture and landscape design from Colorado State University in 2003 and has worked as a landscape designer for the last 20-plus years. After

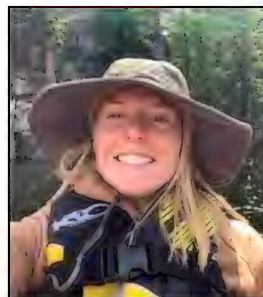
integrating Colorado's native plants into his landscapes for many years, Curtis saw the need for a specific native plant landscaping focus, so he created Meadow Pro in 2018. Curtis gives presentations across the Front Range, including his presentation *Go Native! Landscapes Made for Colorado* at the Denver Botanic Gardens. He also presented *Understanding Garden Soil* at the Landscaping with Colorado Native Plants Conference this spring.



Connor Sullivan studied chemistry and biology at Metropolitan State University, where he found he loved plants and medicine. His goal is to become a doctor and holistically incorporate natural medicine into the diagnosis and treatment of his patients. He is currently a sommelier in downtown Denver.

In his free time, he enjoys hiking, climbing, biking, and learning at the Denver Botanic Gardens.

Northern

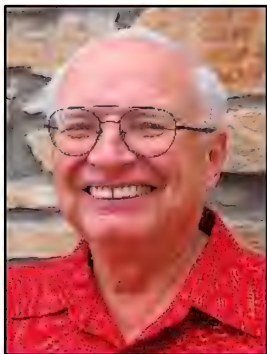


Mason Mizener joined CoNPS in late spring of 2023 after looking for ways to better connect with the community, nature, and native plants. Her interest in botany and native plants began as an undergraduate student at Colorado State University. Her interest deepened as she

explored working in Wyoming conducting vegetation surveys for the Colorado Natural Heritage Program. In 2022, Mason completed a graduate degree in rangeland management from CSU and continued to pursue opportunities to expand her passion and ►

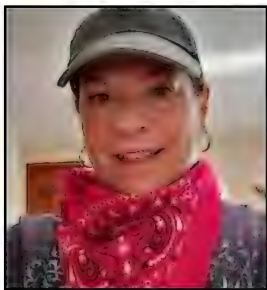
◀ interest of native plants. She loves when the mountains are covered with arrowleaf balsamroot (*Balsamorhiza sagittata*). Mason grew up in the Chihuahuan desert in west Texas, where the smell of rain was never a rare scent, not because they received a lot of rain but because of the smell that the creosote bush (*Larrea tridentata*) releases, which smells identical to rain. When Mason isn't admiring native plants, she's working on her recently purchased house, and hopes to take what she's learned from CoNPS to transform the yard to a native plant garden. Like many Coloradans, she enjoys walking and hiking, or can be found hanging out with her dog, Milo. Mason is excited for the upcoming summer and being with amazing CoNPS members.

Plateau



Jim Pizarowicz has been the Colorado Native Plant Society's Plateau Chapter president or vice-president for the last six years. He has been a wildflower photographer for at least the last 30 years and has posted more than 15,000 flower pictures on the internet or other publications. He is the co-author, with Mary Menz, of

Common Wildflowers of the San Juan Mountains and Wildflowers of Colorado's Western Slope. Jim is a former psychology professor, park ranger, and international cave explorer.



Kathy Kimbrough is a landscape designer and owner of Garden Scentsations in Grand Junction, Colorado, who specializes in Coloradoscapes: low-water native plants suited to Western Colorado. She became a member of CoNPS in March 2023 in order to better

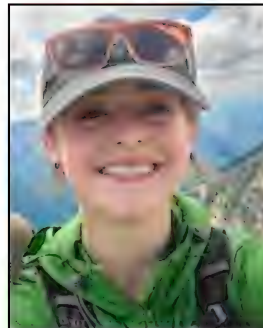
understand native plants in the region. She joined the Education and Outreach Committee because of her experience in public speaking and writing for garden publications. She hopes to bring more awareness of the importance of native plants to homeowners on the Western Slope. In addition to her landscape-design business, she was the first president of the Lavender Association of Western Colorado. She was instrumental in growing it into a statewide organization and co-wrote a specialty crop grant paper to help lavender growers understand which varieties of lavender grow best in our climate. Her journey to being a landscape designer started as a volunteer with the Colorado State University Tri River Area Extension Master Gardener Program for 16 years.

Southeast



Curt Nimz is a hiker and photographer who became interested in wildflowers in 2014 and started taking photos of wildflowers on his hikes, trying to identify them. He was educated as a biologist-ecologist, but not as a botanist. Curt had a 30-year professional career in information technology.

Southwest



Kenar Houghton is the new CoNPS Southwest Chapter chair. She is a graduate of UC Colorado Springs, where she met Maggie Gaddis, a member of the geography and environmental studies faculty at UCCS. Maggie inspired Kenar to pursue her environmental-science degree with an

emphasis in natural resource management, and encouraged her passion for native plants in her education and research, as well as in her personal life. Kenar joined CoNPS in 2020 and has fallen in love with the organization, the work, and the people. Her goal is to continue to support the Southwest Chapter in collaboration, outreach, and new opportunities, and CoNPS by furthering the knowledge, appreciation, and conservation of Colorado native plants and habitats. Kenar says she has had the privilege of calling Colorado her home for her entire life. She currently resides in Durango, where she works for the US Forest Service as an environmental coordinator and the climate-change contact for the San Juan National Forest. In her free time, she loves to be outdoors—whether for hiking, camping, riding her bike, or snowshoeing. Kenar also loves to read, play the piano, and create art when her schedule allows.



John Bregar worked as a geologist and geophysicist in oil and gas exploration for 32 years before he retired. In autumn of 2006, he and his wife, Dorothy, moved from Calgary, Alberta, to Durango, Colorado, where he enjoys leading wildflower, birding, and

hiking and mountain-climbing trips. John is a past chairman of the Southwest Chapter of CoNPS and a past chairman of the now-defunct Southwest Chapter of the Colorado Mountain Club. He currently organizes field trips for the Southwest Chapter of CoNPS and for the Durango Bird Club. 🌀

◀ “What Is CoNPS...” *continued from page 2*

(Castle Rock), and east of the Divide to the eastern and southern borders of Colorado.

The San Luis Valley Chapter follows the geography of the valley, starting at the northern border of Saguache County and flowing all the way to the central southern border of Colorado. The San Luis Valley Chapter is most active in Saguache and Alamosa counties.

The Southwest Chapter is west of the San Luis Valley and south of Gunnison and Montrose counties. The Southwest Chapter is active in San Juan County.

The Plateau Chapter is active in Montrose, Delta, and Mesa Counties, covering the west central geography of Colorado.

The newest chapter forming is in the upper Arkansas River Valley, flowing from the top of the watershed in Lake County, through Chaffee, Fremont, and Pueblo Counties.

There is also a contingency of interested residents hoping to start a

Northwest Chapter. This chapter would be initiated in Routt County. Please let us know if you are interested in helping to start this chapter. The CoNPS bylaws indicate that 10 people or five organizations can work together to start a chapter.

What CoNPS Does through Chapter Engagements and Committee Work

Appreciate and Learn about Native Plants and Habitats

The core work of a CoNPS chapter is to appreciate and learn about native plants. Each chapter hosts at least one monthly activity. In the winter months, we meet in person or virtually to hear from native plant experts, local conservation leaders, authors, scientists, and activists. In the summer months, we meet for botany hikes. It is amazing how much you can learn on a botany hike. No one needs to be a “botanist” or “botany expert” to lead a hike. All you need is motivation. Our collective knowledge is stronger than any one individual’s expertise. Pick a trail you love and contact your nearest chapter leadership team to get the ball rolling.

I am a restoration ecologist. I became a Native Plant Master in graduate school to learn my native plants. I started connecting with CoNPS as a professional because I needed more botany enthusiasts (citizen scientists) to engage in my research. When I started hiking with Curt Nimz, Southeast Chapter chair, I actually became a botanist myself. I learned nearly everything I know about southeastern Colorado native plants from Curt. Thank you, Curt! Nothing can replace the camaraderie of a CoNPS botany hike.

CoNPS chapters also collaborate to learn about gardening with native plants, to collect native seed, to



Our volunteers are the lifeblood of CoNPS and our mission.
© Maggie Gaddis

sow native seed in winter, to share native plants sown. They share their gardens in the annual CoNPS garden tours in each chapter. Each chapter is in a different stage of full engagement in sharing gardens, native plants, and native seeds. We are hoping to develop the full cycle of activities to increase native plant availability for all. If we plant natives in our gardens, share our gardens to learn and troubleshoot, collect

and share seeds from our gardens, and, finally, share plants to grow more gardens, we will be pursuing our mission to its fullest capacity.

Native Plant Horticulture

Our Horticulture Committee facilitates these knowledge and seed transfers. All of our committees support efforts that ultimately occur in our chapters. I like to think of our committees as subcommittees of our board of directors. Every committee has a present or former board member on its leadership team. This helps us to create mentoring and oversight opportunities and to pass communications through the statewide governance and the geographically aligned chapters.

Our Horticulture Committee stewards several CoNPS programs, including:

- Native Plant Garden certification program;
- Native plant availability, including sales, swaps, and propagation training;
- Native plant garden tours; and
- Native plant seed shares. ▶

◀ Education and Outreach

Our Field Studies Committee is currently working on rare plant monitoring through the Adopt-a-Rare Plant Program, which is co-sponsored by the Colorado Natural Heritage Program (CNHP). These rare species are noted by rare plant indexes G (global) and S (state) levels (see the [CNHP website](#) for details). Each year, CNHP chooses two species for CoNPS members to monitor. We seek to monitor species that have not been observed in more than 20 years, particularly those at sites that haven't been visited recently.

Ecological Restoration

Our Restoration Committee is currently working on the USFS Region 2 Rocky Mountain Native Plant Materials Program, also in partnership with CNHP. We are helping to develop the program, to bring hands to the tasks of native plant scouting and seed collection, and to engage other non-profits in the five-state Region 2 to participate in seed collection on National Forest lands. The USFS contract is the first federal funding contract the society has ever received. Furthermore, the work is also generously funded by a bequest from Sue Martin, a founding member of CoNPS, who surely participated in the first rare plant meeting. You can read about that in a [past *Aquilegia* article](https://conps.org/wp-content/uploads/2022/12/Aquilegia_2022_46.4_Fall_ePub-1.pdf) (https://conps.org/wp-content/uploads/2022/12/Aquilegia_2022_46.4_Fall_ePub-1.pdf).

Conservation

Our Conservation Committee works to identify and comment on federal land management actions and state-wide legislation related to native plants and habitats. In addition, the committee contributes regularly to the Conservation Corner column of *Aquilegia*.

Scholarships and Grants

Our Scholarships and Grants Committee helps to recruit applicants, review applications, and fundraise for our three grant programs. Dr. John W. Marr, professor of biology at the University of Colorado Boulder, founded the Institute of Arctic and Alpine Ecology at that institution and was the first president of the Colorado Native Plant Society. Marr grants support research on Colorado native plants.

Myrna Steinkamp was a founding CoNPS member whose years of work on behalf of the society included helping with both editions of the society's publication, *Rare Plants of Colorado*. Steinkamp grants support work on Colorado native plants that are rare or of conservation concern.

CoNPS Mission grants support the development of educational materials, programs, projects or events to inform people about Colorado native plants. Mission grants may also be awarded for native plant research that does not overlap with work funded by Marr and Steinkamp grants. Grants of up to \$1,000 are given twice annually for projects that further education, stewardship, and advocacy for Colorado native plants and habitats. Application deadlines are August 1 and February 1.

Types of projects eligible for a Mission grant include:

Education

Design or implementation of communications efforts to inform people about native plants and habitats.

Educational programs, projects, events, or activities.

Stewardship

- Projects to protect or conserve native plants and habitats.
- Communications efforts to promote conservation of native plants and habitats.

Advocacy

- Support for legislation that benefits native plants and habitats.
- Support for other agencies' efforts to conserve native plants and habitats.

Alice Eastwood, a pioneering Canadian American botanist, taught at Denver's East High School for more than a decade in the late 1800s, all the while botanizing in her free time. One scholarship for \$950 or two for \$475 (her annual salary at East High School) are awarded to undergraduates pursuing degrees that will ultimately advance the mission of the Colorado Native Plant Society.

Please visit <https://conps.org/conps-grants/> for more information.

Media

Our Media Committee works to produce *Aquilegia* magazine, our quarterly publication. The Media Committee also curates our social media presence, although we need help! It's a brave new world out there with so many social media outlets. Please help us rise to the challenge of communicating with over 10,000 followers in social media.

Conclusion

Pick your chapter and pick your topical interests related to native plants! Sign up for these engagement groups by visiting our website. To learn more, attend an upcoming chapter or committee meeting. Get a feel for CoNPS. We would love to work with you. Reach out when you are ready at

ExecutiveDirector@conps.org 

In Memorium: Tim Hogan (1955-2023)

By Dina Clark and Erin Manzitto-Tripp



Tim on South Cone Peak, 2013. © Erin Manzitto-Tripp

Among the most celebrated Colorado botanists of all time, Tim Hogan devoted more than three decades to expertly managing the University of Colorado Museum of Natural History Herbarium (COLO) before retiring in July 2021. Counted among his many contributions is the immeasurable role Tim played in educating scores of students and the public about the importance of botanical and other biodiversity collections and the role they play in the conservation of both species and biologically significant habitats.

Tim's intimate knowledge of biodiversity and conservation derived foremost from his decades of floristic research conducted throughout Colorado, from the expansive backcountry of Eagles Nest Wilderness to the celebrated rugged terrain comprising the Sangre de Cristos. His most formative experiences, however, were in a place near and dear to his heart: the City of Boulder's Open Space & Mountain Parks.

Tim's floristic research in the Boulder Mountain Parks began in the early 1990s and continued for 30 years. The remarkable botanical discoveries, rediscoveries, range extensions, and other scientific contributions he made would seem to satisfy any external observer. But the story continues from there. Tim's most recent research, resurveying the Open Space & Mountain Parks of Boulder, allowed him to document changes over three decades on this impossibly-special stretch of open space near a major urban area, unmatched by nearly any other such area in the United States. This work not only set the tone for understanding change through time, but it has also empowered numerous consumers—from the public to land managers to local scientists—to enjoy, respect, appreciate, and conserve the beauty of botanical life that so surrounds us.

Tim's scientific contributions represented only a mere glimpse into the broader impacts of his work. Why? For days, months, and years, Tim devoted even more time to advocacy for biodiversity and the wildlands that support this biodiversity. For most of his adult life, Tim was a passionate spokesperson for all things conservation. He wrote hundreds—no, thousands—of letters to newspaper columnists, magazine editors, city-council members, state senators, and beyond, as well as letters to organizations, informal groups, and leaders many of us have never heard of.

Tim knew all along that if he reached a single person, then his mission was successful. That mission was to remind the public of the fragility of public lands. His fight to preserve the Arctic National Wildlife Refuge took him to the halls of the US Congress and to the refuge itself. He was an ardent supporter of wilderness and the need for wild places. To this end, he served on committees and in organizations tasked with preserving everything from open spaces to wildlife corridors and rare plants.

If Dr. Seuss's Lorax were a living person, he would be Tim Hogan. Tim's steadfast support of local and larger-scale ecological conservation in and around Boulder have been among the most admirable and noble acts of our time.

Tim died at his home on December 6, 2023. Read Tim's obituary here: [Timothy Hogan—The Natural Funeral](#).

Dina Clark (collections manager, retired) and Erin Manzitto-Tripp (curator) are University of Colorado Herbarium staff. Eleni Arapkiles contributed to the article. ☿



An early photo of Tim in the field. © Tim Hogan's family

Book Review

Brave the Wild River: The Untold Story of Two Women Who Mapped the Botany of the Grand Canyon

**By Melissa L. Sevigny
Review by Pat Butler**

Have you heard of botanists Elzada Clover or Lois Jotter? I hadn't until I read *Brave the Wild River* by Melissa Sevigny (Norton, 2023). In 1938, they became the first women (and first professional botanists) to travel the Colorado River from Green River, Wyoming, to the Boulder (now Hoover) Dam.

Clover had become fascinated by cacti during her childhood in Texas, which led to her formal education in botany, culminating in a PhD from the University of Michigan, her thesis centering on the cacti of the lower Rio Grande Valley. She decided to study southwestern flora along the Colorado River and found a boatman to guide her. Together with Jotter, plus four men as crew, their objective was to advance science by collecting and cataloging flora along the river. Up to that point, in contrast, leaders of earlier trips all had personal financial objectives: to build a railroad, construct dams, prospect for gold, or develop tourist accommodations.

Based on the journals of Clover, Jotter, and three of their companions, the book is an engrossing account of their sometimes-spine-tingling adventures navigating through the Cataract, Glen, and Grand Canyons along with the routine of their daily lives—the men traversed the often-treacherous rapids, but the women did all the cooking, rose early to collect plants, and stayed up late to press them.

The journey was significant because women were not welcomed in either the professional botany or the river-running communities. Clover's PhD in botany was a rarity in American academia at the time; her student, Jotter, had a master's degree in botany and later also obtained her PhD. Both were actively discouraged from attempting the river trip not only by

family members and professional colleagues, but also by men who had run the Colorado River. The women were maligned in the press before, during, and after the trip.

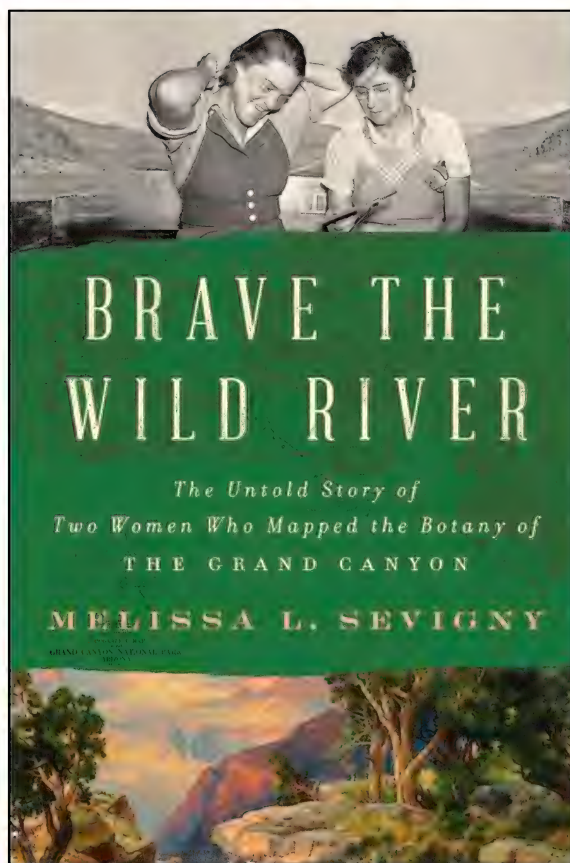
Despite the aspersions, all of the expedition members and their small, hand-built boats (using a new construction material: plywood!) remarkably—considering the minimal river-running experience of the group—survived the expedition after facing hazards on the water for over a month. The women catalogued more than 400 species of plants. Most of these plants were already known to science, but four

new species of cacti were collected (*Echinocereus canyonensis*, probable synonym of *E. coccineus*, scarlet hedgehog cactus; *Echinocereus decumbens*, probable synonym of *E. engelmannii*, long-spined strawberry hedgehog cactus; *Opuntia longiareolata*, probable synonym of *O. basilaris*, Grand Canyon prickly pear; and *Sclerocactus parviflorus*, small-flowered fishhook cactus).

Their reports described the widely varying habitats along the river that allowed diverse flora to survive. Their collections are preserved at the University of Michigan Herbarium, where Clover continued to teach after the expedition. These plant lists were the foundation of later work by the US Geological Survey and the Bureau of Reclamation to evaluate the impact on plant life of the

Hoover and Glen Canyon Dams.

The book is an engaging account of their journey and notes many of the floral species the pair identified. In addition, author Sevigny, a science journalist for Arizona Public Radio, also includes detailed descriptions of the amazing geology along the route (beyond what the group would have known). And she discusses broader contemporary policy issues such as the pressures on the declining flow in the Colorado River, competing National Park Service policies on conservation and tourism, and the persistent challenges for women in science, even today. She concludes with questions about how to manage the river in the future. ☯



News, Events, and Announcements

Please check the **Calendar of Events** online at <https://conps.org/event-calendar-2/#!calendar> for up-to-date information on webinars, chapter meetings, garden tours, field trips, and other events.

CoNPS may offer some chapter meetings, workshops, and lectures as webinars or other online meetings. Others might be postponed or canceled. Information will be posted online and will be promoted via the CoNPS E-News.

CoNPS-Sponsored Events

Workshops and Field Events

National Ecological Observation Network Overview and Tour

Presented by Sam Kacmarsky
June 13, 10:00 AM - 1:00 PM

The National Ecological Observation Network is a nationwide program aimed to survey a variety of ecological variables across many different ecosystem types. These data are open to the public and are used by researchers all over the country. We do outreach events so people can see a little of what we do and how we do it. This typically involves a trip to one of our closer sensor towers and a brief tour of the site around it, as well as talks about the type of data we collect. One of these towers is on the outskirts of Rocky Mountain National Park, located about 15 minutes from Estes Park, and another one is located in the Central Plains Experimental Range, located about 15 minutes from Nunn.

Colorado Lichenology

Presented by Jacob Watts
June 20, 6:30 - 8:30 PM, presentation
June 28, 9:00 AM - 2:00 PM, field trip

Colorado is a rich place of tall mountains and deep valleys. Lichens abound here on any surface that stays put for long enough. This field workshop will give its participants the necessary knowledge and skills to identify some of the most common elements of the lichen biota in Colorado. Attendants will be introduced to common concepts and terms in lichenology. During the outing, common lichen genera and their identifying characteristics will be pointed out.

Todd Gulch Fen Phenology

Hosted by Field Studies Committee and Boulder Chapter
June 26, August 21, August 24; 08:00 AM - 1:00 PM

Todd Gulch Fen is a quaking, floating mat fen located in a small valley in the montane zone of Boulder County. This is an easily accessed fen, less than a

half mile, 120 feet elevational difference from the parking area, on a trail. This field trip will focus on the rare sedges that are found here (*Carex diandra*, lesser panicled sedge, and *Carex lasiocarpa*, woolyfruit sedge), and how to identify other wetland plants we may find. In addition, we will learn about tracking the phenology, using cool apps on your phone!

Willows of Larimer County

Led by Gwen Kittel
Hosted by Northern Chapter
June 29, 8:00 AM - 4:00 PM

Come learn the willows of Larimer County. From the plains to the high mountains, 15-20 willows can be seen, including some rare species! This will be a multi-stop car trip with some hiking involved, but nothing strenuous.

Colorado Native Plants in Urban Systems

Presented by Jennifer Boussetot
July 26, 10:00 AM - 12:00 PM

Tour the CSU Spur campus native plant research center just north of downtown Denver. Our green roofs incorporate many native plant species, especially in a sown meadow project and a long-term native-plants-for-pollinators project. We will tour the research gardens and discuss the projects on both roofs. Then, we will go inside for a classroom discussion on selecting native plants for gardens. ►



Todd Gulch Fen

◀ Willows of Boulder County

Led by Gwen Kittel

Hosted by Boulder Nature Association

August 10, 8:00 AM - 3:00 PM

Come learn the willows of Boulder County. From the plains to the high mountains, 15-20 willows can be seen, including some rare species! This will be a multi-stop car trip with some easy hiking involved.

A New Way to Explore the Ecology of Planted Trees

Presented by Dr. Christina Alba

August 17, 9:00 AM - 10:30 am, presentation

11:00 AM - 1:00 PM, High Line Canal Greenway

Dr. Alba will discuss how different environmental factors, including light, soil moisture, topography, and competition from surrounding plants, interact to shape tree-planting success. She will highlight several tree species with different degrees of drought tolerance. The survey approach being used is unique and has begun to provide some interesting ecological insights. After the talk, we will walk on the High Line Canal to see the tree plantings and talk more broadly about the canal as an ecological and recreational corridor.

Seed Collection Trips

Please join us for seed collection trips to support the **USDA Rocky Mountain Region Native Plant Materials Program**. We collect seeds for the restoration of National Forests and Grasslands across the Rocky Mountain region! Our goal is to ensure there is genetically and geographically appropriate seed available for post-fire restoration, ensuring integrated benefits for long term soil stability, maintaining or improving wildlife habitat, and providing for resilient ecosystems. Hosted by the CoNPS Restoration Committee and the Colorado Natural Heritage Program.

Seed collection is a wonderful, low-impact activity for folks of all ages. We will work together to identify and collect the program's target species for the restoration of forest system lands within our region. For all of our

seed collection events, we will facilitate camping on Thursday and Friday nights. Camping is optional. All seed collection events will start from the campsite, and we will carpool to the seed collection sites and return to the campsite at the end of the day. To participate, register at <https://conps.org/home-2/events/event-calendar-2/#!calendar>

June 28- 29, 8:00 AM - 2:00 PM

Thunder Basin, WY

July 12-13, 8:00 AM - 2:00 PM

Laramie Peak and Pole Mountain Areas, WY and Cimarron and Comanche National Grasslands, CO

July 26-27, 8:00 AM - 2:00 PM

Pawnee National Grassland, CO and San Juan National Forest, CO

August 9-10, 8:00 AM - 2:00 PM

Shoshone National Forest, WY and Black Hills National Forest, SD

August 23-24, 8:00 AM - 2:00 PM

Arapaho/Roosevelt National Forest, CO

September 6-7, 8:00 AM - 2:00 PM

Cimarron and Comanche National Grasslands, CO and White River National Forest, CO

September 21, 8:00 AM - 2:00 PM

San Juan National Forest, CO

October 4-5, 8:00 AM - 2:00 PM

Nebraska Northwest, NE

[https://youtube.com/playlist?list=PLJzB1Phfy9--](https://youtube.com/playlist?list=PLJzB1Phfy9--B5ALXRQU4JY4k3EF8wRRL&si=LGHEFfcI0Nkrvajt)

[B5ALXRQU4JY4k3EF8wRRL&si=LGHEFfcI0Nkrvajt](https://youtube.com/playlist?list=PLJzB1Phfy9--B5ALXRQU4JY4k3EF8wRRL&si=LGHEFfcI0Nkrvajt)

Field Trips

Dominguez Canyon - Bridgeport TH

Hosted by Plateau Chapter

June 10, 6:00 AM - 7:30 PM

Betasso Preserve Canyon

Led by Pat and Sam, Hosted by Boulder Chapter

June 12, 4:30 AM - 7:00 PM

Pikes Peak - Elk Park

Led by Doris Drisgill, Hosted by Southeast Chapter

June 20, 9:00 AM - 1:00 PM

Sandstone Ranch Open Space

Led by Pam Schulz, Hosted by Southeast Chapter

June 22, 2024, 9:00 AM - 2:00 PM

Front Range Wildflower Hikes

Led by Rob Pickett, Hosted by Northern Chapter

June 24, 9:00 AM - 1:00 PM

Buckhorn Lakes Park

Led by Jim Pisarowicz, Hosted by Plateau Chapter

June 25, 8:30 - 11:00 AM

Upper Lime Creek Trail

Led by Sue Parks, Hosted by Southwest Chapter

June 27, 8:15 AM - 4:00 PM ►



◀ Florissant Fossil Beds NM

Led by Tom Green, Hosted by Southeast Chapter
June 29, 9:00 AM - 1:00 PM

Loveland Pass Lakes

Led by Kelly Ambler, Hosted by Metro-Denver Chapter
July 11, 8:00 AM - 2:00 PM

Women's Forest, Divide

Led by Barbara Valenti, Hosted by Southeast Chapter
July 13, 9:00 AM to NOON

Bear Creek Regional Park

Led by Nethery Wylie, Hosted by Southeast Chapter
July 14, 9:30 AM - 1:00 PM

Eureka Gulch

Led by John Bregar, Hosted by Southwest Chapter
July 20, 6:30 AM - 2:00 PM

Lovell Gulch

Led by Curt Nimz, Hosted by Southeast Chapter
July 26, 9:00 AM - NOON

Sharkstooth Trail, La Plata Mountains

Led by Travis Ward, Hosted by Southwest Chapter
July 27, time TBD

Cuatro Peak

Led by Tom Green, Hosted by Southeast Chapter
July 27, 7:00 AM - 4:00 PM

Red Rock Canyon Open Space

Led by Curt Nimz, Hosted by Southeast Chapter
August 13, 9:00 - 11:00 AM

Westview Loop, Log Chutes Trail System

Led by Karen Hwang, Hosted by Southwest Chapter
August 10, time TBD

Native Plant Gardening

Boulder Chapter Native Garden Tour and Plant Sale

Partnering with Harlequin's Gardens
June 15
9:00 AM to NOON, garden tour
NOON - 1:00 PM, plant sale for tour participants
1:00 - 3:00 PM, plant sale open to the public

Gunnison Native Garden Tour

Hosted by the Plateau Chapter
June 16, 1:00 - 5:00 PM

Birds and Blooms Native Plant Garden Fest

Partner event Hosted by Denver Audubon
June 22, 10:00 AM - 1:00 PM
<https://denveraudubon.org/events/birds-blooms-native-plant-garden-fest-2/>

Gardens on Tour

Hosted by Durango Botanic Gardens
June 22, 9:00 AM - 4:00 PM
<https://www.gardensontour.org/>

Grand Valley Native Garden Tour

Hosted by Plateau Chapter
June 22
8:30 - 9:00 AM carpool and coffee meet-up
9:00 AM - 1:00 PM, garden tour

Native Garden Installation and Plant Swap

Hosted by Southeast Chapter and City of Colorado Springs Horticulture Department
June 23
12:00 - 2:00 PM, Sustain-a-Center garden installation and plant share for volunteers
2:00 - 3:30 PM, plant sale open to the public

Denver Native Plant Swap – Partner Event

Hosted by Wild Ones Front Range, People and Pollinators Action Network, and EarthLinks
June 24, 10:00 AM - 1:00 PM

Northern Chapter Native Garden Tour and Plant Sale

Partnering with High Plains Environmental Center
June 30
9:00 AM - NOON, garden tour
NOON - 1:00 PM, plant sale for tour participants
1:00 - 3:00 PM, plant sale open to the public

Ute Learning Garden Tour and the Chinle Cactus & Succulent Society Demonstration Garden

Hosted by Plateau Chapter
July 8, 6:00 - 7:30 PM

Estes Park Garden Tour

Hosted by Northern Chapter
July 13, time TBD

Conifer Eco-Garden Visit with Dennis Swiftdeer Paige

Hosted by Metro-Denver Chapter
July 17, 10:00 AM - NOON

Recurring Events

CoNPS Board Meeting

June 23 and August 25, 4:00 - 6:00 PM, virtual

CoNPS Book Club

Botany of Desire by Michael Pollan
June 30 and July 28, 10:00 - 11:00 AM

CoNPS Book Club

Braiding Sweetgrass by Robin Wall Kimmerer
August 25 and September 29, 10:00 - 11:00 AM ►

CoNPS Committee Updates

◀ Our committees, by CoNPS members, board members, and staff, focus on specific native plant related topics and initiatives, crossing chapter boundaries. Committee meetings are a great space for collaboration and professional development and training, although attendance is not a requirement of joining. The committees are composed of members from any-and all-chapters. Members perform the work of the committee and help to engage our chapter communities in these efforts. With some exceptions, each committee is chaired or co-chaired by a CoNPS board member, as well as our executive director. This increases cross-communication with the board of directors. To receive communications about any committee's work, join by visiting <https://conps.org/home-2/about-us/committees/>

Grants and Scholarships Committees

Stephen Stern, Christina Alba, chairs

The following grants have recently been awarded.

Myrna Steinkamp Grants

William Petry, Assistant Professor Northern Colorado State University, "Fusing Data Sources Across Spatial Scales for Holistic Demographic Monitoring of the Avery Peak Twinpod (*Physaria alpina*)"

My-Lan Le, master's student at University of Colorado Denver and Denver Botanic Garden, "Environmental Variation and Reproductive Ecology of a Rare, Endemic Alpine Plant (*Physaria alpina*)"

John W. Marr Grants

Sabrina Dritz, PhD student at University of California, Davis, "The Functional Response of Bumblebee Pollination in Diverse Floral Landscapes"

Kyla Knauf, PhD student at Northwestern University and the Chicago Botanic Garden, "It's Not Just Flower Power: the Importance of Seed Phenology in Conjunction with Flowering Phenology to Assess Climate Change Effects on Rocky Mountain Wildflowers"

Carson Bay, undergraduate at United States Air Force Academy, "Physiological Response of Ponderosa Pine to Parasitic Infection and its Implications for Surviving Climate Change"

Horticulture Committee

Ann Grant, Alex Smith, Alex Crochet, co-chairs

The Horticulture Committee stewards several CoNPS Programs, including:

- Native plant garden certification program
- Native plant availability, including sales, swaps, and propagation training opportunities
- Native plant garden tours
- Native seed shares
- Education and outreach events

The Horticulture Committee recently revised the Native Garden Certification Program rubric and application process. Our garden tours and plant sales are scheduled! We are always working to broker relationships between our members and the businesses that can supply native plants. We are always working to provide exceptional professional development opportunities by linking professionals to our members through our programming.

Restoration Committee Meeting

Andrea England, chair

We are busy in year two of our engagement to develop the Region 2 USFS Rocky Mountain Native Plant Materials Program. We are partnering with CNHP in this effort. Our role is to bring many eyes and hands to the task of seed scouting and collecting. Join us for monthly Restoration Committee meetings in which we converse about restoration efforts in Colorado at large, followed by a training module that supports our efforts. We are currently learning how to use Ackerfield's *Flora of Colorado* to take research grade photos of the native species we will scout for and collect seed from to fulfill our commitment to the project. Each month, we showcase at least one species on the target list for seed collection.

◀ "Conservation Committee..." continued from page 11

ordinances regarding landscaping to prohibit the installation of nonfunctional turf and invasive plant species in 'applicable property' such as condo associations, commercial, institutional, industrial properties, street rights-of-ways, medians, parking lots, and transportation corridors, but excludes other residential property (apartments and single-family homes, for example). After January 1, 2026, the installation, planting, or placement of nonfunctional turf, artificial turf, or invasive plant species will not be allowed.

Bill Status: Passed both houses; signed by the Governor.

Other bills of interest on which CoNPS did not take a position:

SB24-230: This bill and its companion SB24-229 were both introduced very late in the session as compromises between the oil and gas industry and environmentalists. Both camps had proposed dueling initiatives for this fall, which they agreed to drop in favor of these two bills. SB24-230 would levy the oil and gas industry to provide funding for transit operations, limiting ozone on the Front Range. It would also provide an estimated \$56 million to \$59 million per year to CPW for a new Climate Resilient Wildlife and Land Cash Fund for "wildlife and land remediation." Specifically, the bill authorizes this large amount of money to be spent for: "(I) Creating new ►

◀ state parks and new state wildlife areas, with a primary focus on benefits to wildlife and native biodiversity; (II) Slowing biodiversity loss and improving ecosystem resilience; (III) Improving wildlife connectivity and migration corridors; (IV) Acquiring and leasing lands and waters for the protection of wildlife and habitats; (V) Restoring lands, including improvements in grassland, forest, watershed, shrubland, riparian, and aquatic ecosystem health; (VI) Native species conservation, rehabilitation, and reintroduction, except for the reintroduction of grizzly bears and gray wolves that negatively impact livestock; (VII) Continued research and monitoring of threats to Colorado wildlife and ecosystems, including from climate change and oil and gas operations”

Bill Status: Passed both houses; signed by the Governor.

HB24-1178: Allows local governments to regulate pesticides more tightly than the state, if guided by peer-reviewed science. Local governments would not be allowed to more tightly regulate pesticide use for the production of agricultural products, noxious weed management on land enrolled in a water conservation program, use by a public utility, for operation or maintenance of water supply or distribution systems, or the cultivation of marijuana.

Bill Status: In House, passed Energy and Environment Committee and Appropriations Committee. It has been laid over for two months; passage seems unlikely due to opposition from pesticide applicators and others.

CoNPS Chapter Updates

Arkansas River Valley Chapter: Have you ever been jealous of the native plant networking in larger

CoNPS Restoration Internship Announcement

CoNPS announces the availability of restoration internships to assist in the development and implementation of the **USDA Rocky Mountain Region Native Plant Materials Program**. CoNPS restoration interns will assist the Colorado Natural Heritage Program (CNHP) by scouting ahead of the CNHP crews. The intern(s) and CoNPS members they organize will keep us informed of the phenology in the scheduled seed collection locations. The person will engage local communities in preparatory gatherings and trainings and help implement seed collections. If engaged before the summer, they may assist with training and community outreach projects that are in process and with administration of the CoNPS Restoration Committee. Interns could work remotely from anywhere for office work, but the expectation is that they will travel and build relationships in our seed collection communities. <https://docs.google.com/document/d/1uFeNCHUP6jxC2A7sZdy3Cmtfa5KJyQLv3TBRSnlys/edit>

Colorado cities? Sad that you have to drive miles away to join a nature hike? Curious about the wide range of habitats from 10,000'+ in Leadville to 5,000' in Cañon City? Wait no more! Two Buena Vista residents are making your dreams come true with a new Arkansas River Valley Chapter. Email us at arkvalleyconps@gmail.com to stay in the loop and/or if you have interest in leading a hike, presentation, or garden tour. We can't wait to meet you!

Hi from Gunnison! We are very excited to hold our first Colorado native plant garden tour on June 16 in Gunnison. While we have yet to form a chapter here, we hope to initiate interest in our sagebrush steppe species, and to increase our knowledge of what we can do with native plants in our gardens. Our five-garden tour showcases gardens ranging from 'just beginning' to 'well-fashioned and researched crevice garden' examples. We hope you can join us.

Metro-Denver Chapter: Our leadership team has expanded and includes individuals who live in different areas and have different backgrounds and interests. One of our current goals is to establish projects and/or partnerships with local municipalities.

Northern Chapter: CoNPS has formed the NOCO Native Plant Exchange with our long-time collaborators the City of Fort Collins Nature in the City Program, Wildlands Restoration Volunteers, People and Pollinators Network, Wild Ones Front Range, and League of Women Voters Habitat Pollinator Group. Our aim is to promote the growing of native plants to create ecosystem services for pollinators and other invertebrates and small mammals, while creating natural spaces for the enjoyment of all and at the same time using less water, chemical fertilizers, and pesticides. We are working with municipalities and gardeners up and down the Front Range and beyond to provide native plants and seeds free to everyone. We are engaging the private sector and are very happy to have OneCanopy Greenhouses in Loveland as a partner. For more information, contact Ann Grant, odygrant@gmail.com

Plateau Chapter: We are in the final stages of putting together our first ever CoNPS native plant tour in the Grand Valley. We have six gardens to see throughout the Valley. Our focus this year is to help homeowners see the value of adding native plants to their landscapes to help native pollinators, birds and wildlife thrive in our area. We also have several wildflower hikes scheduled this summer.

Southwest Chapter: We will have a plethora of field trips to offer this summer. We are also hoping to schedule reoccurring chapter meet-ups at some of the local parks to get to know members and discuss future chapter events and needs. 🌀

Cross-Pollination Events

CoNPS Participated in Annual Rocky Mountain Stamp Show, May 24–26

By Steve Bonowski

We are pleased to announce that CoNPS had a booth at the Rocky Mountain Stamp Show (RMSS), compliments of the show's organizers. The RMSS is the premier annual show in the Intermountain West for collectors, students, researchers, and fans of postal history and postage stamps. The theme of the 2024 show was *Native Plants of Colorado*. The show was held at the Arapahoe County Fairgrounds in Aurora.

The show featured dealer booths; exhibits of stamps and postal history; activities for youth, which may count toward Scout merit badges in stamp collecting; and meetings of various stamp-collecting societies, including the Colorado Postal History Society. The US Postal Service also had staff present.

There is a long-standing connection between stamp collecting and a love of plants and nature. The American Topical Association has many flowers, trees, and other plants on their members-only checklists of various topic-based stamps to collect. The US Postal Service has issued many sheetlets and individual stamps showing landscapes, flora, and fauna.

For more information, see the show website at www.rockymountainstampshow.com

Longtime Colorado conservationist Steve Bonowski climbersteveb@gmail.com handled some of the show's public relations.

Seeking Volunteers to Join Bumble Bee Atlas!

The Mountain States Bumble Bee Atlas, a new community science project, has launched! This project is a collaboration between the Xerces Society for Invertebrate Conservation and the Bureau of Land Management to track and conserve native bumble bees. Community scientists spread out across the region (Wyoming, Colorado, Utah, and Nevada) to survey for bumble bees and report back what they find. Online and in-person workshops provide the necessary skills, knowledge, and confidence to conduct your own bumble bee surveys. Survey methods are catch-and-release, so no bees are harmed and all we need are your photographs—no bee identification experience is necessary! The Bumble Bee Atlas has an [informative website](#) where you can register for the webinar and learn about the bees of our region.

Rocky Mountain Plant Symposium Hosted by the Estes Valley Land Trust

June 12, 9:00 AM - NOON

Register at <https://evlandtrust.org/rsvp/>

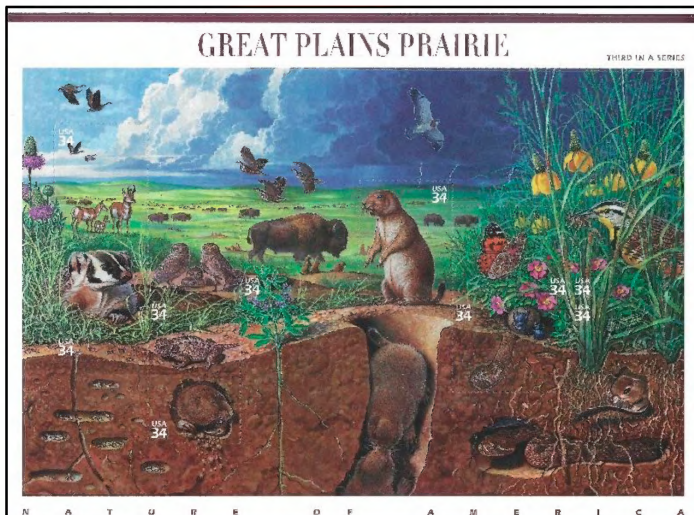
Broomfield Nature Fest

Partner event

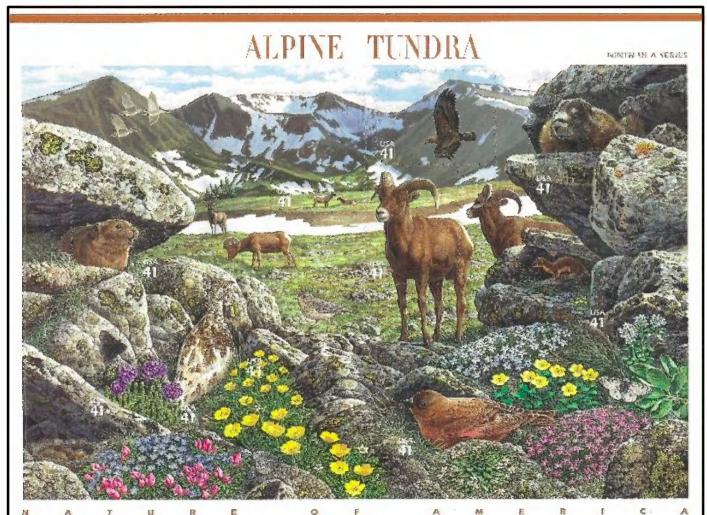
August 17, 10:00 AM - 2:00 PM

Colorado Garden Foundation Annual Awards Program Deadline August 30

<https://www.coloradogardenfoundation.org/wp-content/uploads/2023/07/Annual-Grant-Awards-Program.pdf> 📄



Nature of America stamp sheet. Plants shown above: *Dalea purpurea* (purple prairie clover), *Buchloe dactyloides* (buffalo grass), *Pedimelum tenuiflorum* (slimflower scurfpea), *Ratibida columnifera* (prairie coneflower), *Rosa arkansana* (prairie wild rose), *Schizachyrium scoparium* (little bluestem).



Nature of America stamp sheet. Plants shown above: *Rhizocarpon geographicum* (map lichen), *Polemonium viscosum* (sky pilot), *Eritrichium argenteum* (alpine forget-me-not), *Trifolium nanum* (dwarf clover), *Geum rossii* (alpine avens), *Phlox pulvinata* (alpine phlox), *Ranunculus* sp. (butter cup), *Claytonia megarhiza* (alpine spring beauty), *Silene acaulis* (moss campion), *Noccaea fendleri* (mountain candytuft).

Become a CoNPS Member

Name _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____
 E-mail _____
 Chapter (if known) _____

- ☐ New ☐ Renewal
- ☐ Student \$17 ☐ Senior (65+) \$17 ☐ Individual \$25
☐ Family \$35 ☐ Plant Lover \$50 ☐ Supporting \$100
☐ Patron \$250 ☐ Benefactor \$500 ☐ Life Member \$800

☐ **Printed Color Copy** of the magazine, *Aquilegia*, \$20

CHAPTERS: Boulder, Metro-Denver, Northern (Ft. Collins-Greeley), Plateau (Grand Junction and West Slope), San Luis Chapter (Crestone, Alamosa, Salida), Southeast (Colorado Springs-Pueblo), Southwest (Durango), or Unaffiliated

If this is a change in address, please write your old address here.

Address _____
 City _____ State _____ Zip _____

☐ **Check box to receive information on volunteer opportunities**

DUES include the electronic version of the *Aquilegia* magazine, published quarterly.

The full color electronic publication arrives by email. For those members without email addresses, please apply for a scholarship to receive print copies.

Membership dues cover a 12-month period.

You may also join online at <https://conps.org/join-donate/>

CONTRIBUTIONS to CoNPS are tax deductible:

John Marr fund for research on the biology and natural history of Colorado native plants \$ _____

Myrna P. Steinkamp Memorial fund for research and other activities to benefit the rare plants of Colorado \$ _____

Alice Eastwood Scholarship fund to help support undergraduates pursuing bachelor's degrees that ultimately advance the mission of the Society \$ _____

Mission Grant to support the mission of the Society \$ _____
 Total included: \$ _____

Please make check payable to:

Colorado Native Plant Society

Send completed form and full remittance to:
 CoNPS Office
 1536 Wynkoop Street, Suite 911
 Denver, CO 80202



2023 CoNPS Annual Conference Sponsors



Can You Identify These Penstemons?



Answers (clockwise from upper left): *Penstemon auriberbis* (Colorado beardtongue), *P. whippleanus* (Whipple's penstemon), *P. virgatus* var. *asa-grayi* (one-sided penstemon), *P. glaber* (sawsepal penstemon), *P. albidus* (white penstemon), and *P. secundiflorus* (sidebells penstemon). © Anna Wilson





Colorado Native Plant Society

a non-profit organization dedicated to furthering the knowledge, appreciation, and conservation of native plants and habitats of Colorado through education, stewardship, and advocacy

Main Administration
1536 Wynkoop St., Suite 911
Denver, CO 80202

<http://www.conps.org>
conpsoffice@gmail.com
720-885-9558

Program Headquarters & Store
904 E. Boulder St.
Colorado Springs, CO 80903

SAVE THE DATE!

September 20-22

**2024 Rare Plant Symposium and
CoNPS Annual Conference**

Restoration in the Wild and at Home

Durango, CO

<https://conps.org/home-2/events/event-calendar-2/#!event/2024/9/21/conps-annual-conference-durango>

